

ANNUAL PUBLIC HEALTH REPORT

OF THE

PROVINCE OF BIHAR AND ORISSA

FOR THE YEAR

1933

AND THE

ANNUAL VACCINATION REPORT

FOR THE YEAR

1933-34

BY

Major S. L. MITRA, D.P.H., I.M.S.,

Offg. Director of Public Health, Bihar and Orissa.



SUPERINTENDENT, GOVERNMENT PRINTING,
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PROVINCE OF BIHAR & ORISSA

Scale 1" = 64 Miles



REFERENCE TO NUMBERS

- | | |
|---------------|-------------|
| 1 KARAIKELA | 5 FIGIRIA |
| 2 NILGIRI | 6 ATHGARH |
| 3 NARSINGHPUR | 7 KHANDPARA |
| 4 BARAMDA | 8 RANPUR |



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Annual Public Health Report of the Province of Bihar and Orissa for the year 1933.

CHAPTER I.

Meteorology ; prices of grains, etc.

1. Rainfall.—

The following short account of the meteorological conditions in the province during the year 1933 is taken from the report of the Director-General of Observatories :—

The total rainfall in January was in moderate excess in Bihar and in large excess in Chota Nagpur and Orissa. Chota Nagpur had three times its normal amount and Orissa had two and half times its usual fall. Humidity was in defect and the minimum temperature was below in Chota Nagpur and Bihar.

The total rainfall in February was in slight defect over the province, but was in excess in Orissa and Chota Nagpur. Humidity was in excess in Chota Nagpur. Maximum temperature was above normal in Bihar and the minimum was normal in Orissa and Chota Nagpur.

The total rainfall in March was in large defect over the whole province. Humidity was in defect and the maximum temperature was more than the usual all over the province.

The rainfall for the month of April was in large excess over the whole province specially Chota Nagpur. But the humidity remained in defect and the maximum and minimum temperature recorded was below normal.

The total rainfall in May was in excess by 70 per cent and the skies were more clouded than usual in the whole of Bihar and Orissa. Both maximum and minimum temperatures were recorded below normal in Orissa and Chota Nagpur while the maximum temperature alone was in defect in Bihar.

The total rainfall in June was in defect by 1 per cent in Bihar but was in slight excess in Orissa. Maximum temperature was in slight defect while the minimum remained normal. There was no departure shown in the relative humidity.

The total rainfall in August was in slight excess over the province and Orissa experienced a heavy local monsoon resulting in floods over Cuttack district. Maximum and minimum temperatures recorded were just below normal while the humidity remained normal.

The rainfall in September was in defect by 13 per cent all over the province—although it was just normal in Chota Nagpur. Maximum temperature was just below normal but the minimum rose slightly above the usual. Relative humidity was slightly in defect.

The total rainfall in October was in slight excess in Chota Nagpur and Orissa, but it remained in defect in Bihar.

The total rainfall in November was in defect over the whole province. Maximum temperature was slightly above the normal, but the minimum remained markedly less than the normal with the result that the greater parts of the nights in Bihar and Orissa were cooler during the first fortnight.

In December the total rainfall was in moderate defect over the province but recorded a slight excess in Chota Nagpur. Other elements were normal throughout.

The total amount of monsoon rainfall recorded was 47·9", that is 2·8" or 6 per cent in excess over the usual fall. But the distributions varied in

different divisions. Orissa experienced an excess of 13·6" rainfall, while Chota Nagpur an excess of ·2" only, but Bihar proper had 1·6" below the normal rainfall.

2. Price of common grains.—

The average price of common rice varied from 10 seers and 2 chattaks to the rupee in Darbhanga to 27 seers 13 chattaks in Angul. But in the majority of the districts it remained over 12 seers as against 9 to 10 seers in the previous years, i.e., an increase of 2 seers to a rupee during the year under report.

*The following statement shows the average monthly price of common rice at the headquarters markets of the districts of the whole province for the year 1933.

Quantities per rupee in seers of 80 tolas.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.	Sr. Ch.
Patna	14 8	13 12	14 2	14 10	13 12	13 8	13 12	13 12	14 2	14 10	14 0	15 8
Gaya	13 0	13 0	13 0	13 0	13 0	13 0	14 0	13 4	13 8	14 8	14 8	15 4
Shahabad	13 2	13 0	13 0	13 0	13 0	12 0	11 0	11 0	12 4	12 8	13 0	13 0
Saran	12 0	13 0	13 0	13 0	13 0	12 12	12 8	12 8	13 0	13 0	13 0	13 0
Champaran	13 8	13 8	13 2	12 14	13 8	12 8	12 8	13 0	13 0	13 0	13 8	14 0
Muzaffarpur	13 4	12 8	13 4	14 0	13 8	12 8	11 0	11 0	11 12	12 0	12 0	12 0
Darbhanga	13 0	12 0	12 0	12 0	12 4	11 12	10 12	10 14	11 8	11 14	12 0	12 8
Monghyr	12 2	11 10	13 8	13 0	13 0	13 0	13 0	13 0	12 12	13 6	12 8	11 12
Bhagalpur	13 12	13 0	13 0	13 8	13 8	13 8	13 0	13 0	12 10	13 10	12 10	16 0
Purnea	14 8	14 8	14 0	14 0	13 0	13 0	12 0	12 0	12 0	11 8	11 0	13 8
Santal Parganas	16 8	16 0	16 0	16 8	16 0	13 12	14 0	14 0	15 0	17 8	19 0	19 0
Cuttack	20 8	21 0	21 0	21 0	20 8	19 11	17 12	17 1	16 7	17 1	21 0	18 6
Balasore	22 8	22 0	21 12	21 0	20 0	17 8	16 0	15 8	16 0	16 0	19 8	21 0
Angul	27 13	25 11	25 11	25 3	25 3	25 3	23 9	23 8	21 0	20 0	23 2	25 3
Puri	18 6	20 6	21 0	21 0	21 0	17 12	17 12	15 7	15 12	14 7	17 1	16 12
Sambalpur	21 15	20 4	20 4	20 4	19 2	18 0	18 0	18 0	20 4	20 4	23 13	23 10
Hazaribagh	13 4	13 4	13 8	13 8	13 6	13 0	12 8	12 12	14 8	15 5	15 12	15 8
Ranchi	14 8	14 12	15 2	15 8	14 0	13 4	14 8	14 0	15 0	15 8	16 8	19 0
Palamau	14 8	14 8	14 12	14 12	13 10	13 4	13 2	13 4	15 8	15 8	16 0	16 8
Manbhum	14 8	14 0	15 0	15 8	14 0	14 0	13 8	12 8	13 0	13 0	14 8	17 0
Singbhum	15 8	16 0	15 8	14 0	13 8	13 8	13 0	13 0	13 8	14 8	16 0	16 0

*Price prevailing on the last day of the month.

The average price of common rice during 1931 and 1932 varied from 6 seers 8 chattaks to 25 seers 3 chattaks and 5 seers to 16 seers 12 chattaks, to the rupee respectively. The average price of common rice during the

five years 1927—1931 ranged from 4 seers 6 chattaks to 25 seers 3 chattaks as compared to 4 seers to $16\frac{1}{6}$ seers to the rupee, in the previous quinquennium. Thus the price of rice has been steadily going down during the last decade.

CHAPTER II.

Vital statistics.

1. General Census.—

The census of 1931 recorded a population of 37,677,576 for the province. This figure has been utilised to calculate all the ratios in this report. The population and vital occurrences of the Orissa States are not included in the report.

The population figure based on the natural increase method, i.e., the addition of excess of births over deaths was 38,191,127. This figure cannot be regarded as quite accurate on account of errors due to emigration and immigration and due to faulty recording of births and deaths. Every year a large number of labourers emigrate from this province to Bengal and Assam but the figures of emigration and immigration are not available.

2. The estimated population for the year under review was 38,412,182. This figure has been calculated on the assumption that the population increased by arithmetical progression.

The following two statements record the estimated population in various age groups and also the ratios of births and deaths from the chief diseases, calculated on the estimated population of 1933 :—

STATEMENT A.

Population according to age group of the province of Bihar and Orissa.

1	2		3		4		5		6	
—	Under one year.		One and under five years.		Five and under 10 years.		10 and under 15 years.		15 and under 20 years.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Census, 1921 ...	488,341	490,725	1,434,380	1,565,592	2,735,083	2,648,138	2,170,629	1,827,533	1,433,777	1,350,656
Census, 1931 ...	459,557	467,993	2,274,148	2,400,907	2,642,921	2,430,279	2,302,350	2,043,919	1,563,970	1,620,938
Decennial increase or decrease.	-28,784	-22,732	+839,768	+835,315	-92,161	-217,659	+131,721	+216,386	+130,193	+270,272
Annual increase or decrease, 1933.	-5,756	-4,516	+167,954	+167,063	-18,432	-43,572	+26,344	+43,278	+26,038	+54,054

1	7		8		9		10		11	
—	20 and under 30 years.		30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and upwards.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Census, 1921 ...	2,609,645	2,967,551	2,453,659	2,602,387	1,725,545	1,748,766	963,183	1,018,973	749,623	1,018,002
Census, 1931 ...	3,218,213	3,422,319	2,714,059	2,737,421	1,865,043	1,811,586	1,069,752	1,069,899	684,125	848,187
Decennial increase or decrease.	+608,568	+454,768	+260,400	+135,034	+139,498	+62,820	+106,570	+80,926	-65,501	-169,815
Annual increase or decrease, 1933.	+121,714	+90,954	+52,080	+27,006	+27,900	+12,564	+21,314	+16,186	-13,100	-33,962

STATEMENT B.

Ratios of births and deaths from chief diseases calculated on the estimated population of 1933.

—					Male.	Female.	Total.
Births	...	...	...	...	18.0	17.1	35.1
Total deaths	...	...	...	...	22.4	20.9	21.7
Cholera	...	...	...	...	0.4	0.5	0.5
Small-pox	...	...	...	...	1.1	1.1	1.1
Plague	...	...	...	...	0.03	0.05	0.04
Fevers	...	...	...	...	15.4	14.5	15.0
Dysentery and Diarrhoea	...	...	...	...	0.5	0.4	0.4
Respiratory diseases	...	...	...	...	0.2	0.1	0.2

3. The total number of births in this province during the year was 1,346,948 as compared to 1,272,296 in the previous year. This means an increase of 74,652 births or 0.2 per thousand population, over those recorded in the preceding year. The provincial birth-rate for the year 1933 was 35.72 as compared with 33.8 in 1932 and 33.9 in 1931. The average birth-rate for the last ten years was 33.2.

The statement below gives figures regarding birth-rates in other provinces of India :—

Province.				Birth-rate per mille of population.	
Bihar and Orissa	35.72
Bengal	29.53
United Provinces	39.22
Central Provinces	44.25
Punjab	44.44
Bombay	35.39
Madras	37.72
Burma	29.83
Assam	31.04
North-West Frontier Provinces	30.05

4. Birth Registration.—

The highest birth-rate 47.7 was recorded in the Angul district and lowest birth-rate 27.5 in the district of Singhbhum. Revelganj, Sitamarhi and Daudnagar showed birth-rates of 47.3, 42.4 and 42.1, respectively whilst Sahebganj, Madhupur and Jamshedpur recorded the lowest rates, namely 7.6, 6.3 and 4.9, respectively.

The mean birth-rate for the towns was 22 and for the districts 36·3. The majority of the towns and the districts recorded birth-rates near the mean figures. The exceptions, both high and low, are few and the variations occur amongst comparatively small populations and do not greatly affect the average rate.

5. Deaths.—

The low death-rate has again been a feature of the year. As in the previous year this has been due largely to the absence of any severe epidemic in the province. The total number of deaths in the province during the year under review was 833,397 as compared to 775,945 in the previous year. This means an increase of 57,452 deaths or 1·5 per mille population over those recorded in the preceding year. This slight rise is due largely to general causes and also due to the fact that the year under report experienced slightly heavier mortality from small-pox. The provincial death-rate for 1933 was 22·1 as compared with 20·6 in 1932 and 26·6 in 1931. The average death-rate for the last ten years was 23·7.

The statement below shows comparative death-rates in other provinces:—

				Death-rate per mille of population.
Bihar and Orissa	...	...	...	22·1
Bengal	...	...	...	24·00
United Provinces	...	...	...	18·69
Central Provinces	...	...	...	26·55
Punjab	...	...	...	28·16
Bombay	...	...	...	24·79
Madras	...	...	...	23·6
Burma	...	...	...	18·7
Assam	...	...	...	20·3
North-West Frontier Provinces	...	...	...	21·28

6. Death Registration.—

The highest death-rates were recorded in the districts of Balasore, Cuttack and Puri as 35·2, 35·1 and 32·7, respectively, whilst the lowest were recorded in Singhbhum, Manbhum and Hazaribagh districts as 13·6, 14·4 and 16·6, respectively. Amongst the towns in the province the highest death-rates were recorded in Gaya (42·6), Puri (32·6), and Kendrapara (28·6); and lowest in Madhupur (1·9), Sahebganj (2·6) and Arrah and Dumraon (3·7). Very likely these low figures are due to faulty registration.

The rate of increase in the population i.e., the excess of birth-rate over the death-rate in the province was 13·6 as compared with 13·2 in the previous year.

The Orissa division recorded the highest death-rate (32·7) and an excess of deaths by ·5 per thousand population over the birth-rate was recorded in the district of Balasore.

7. Mortality according to age, class and sex.—

The mortality rate based on the census figures of 1931 was 215·1 for male infants and 177·8 for female infants under one year of age per mille population, as compared to the corresponding figures of 138·2 and 119·0 in the previous year. But when calculated from the actual births recorded in 1933, the mortality rate for infants under one year was found to be 143·1 for males, and 126·9 for females, per mille with the total infant mortality rate of 135·2 per

mille, as against the corresponding total of 128·8 in 1932. The mortality rate for the urban areas was 166·1 and that for the rural areas 134·5. With the termination of the 1st year of life, the rate fell to 38·4 for males, and 34·7 for females, as compared with the corresponding fall to 37·2 and 32·5, in the previous year. As usual the total mortality amongst males was higher than that amongst females in the ratio of 107 to 100.

Differences in the death-rates were noted as usual amongst the different classes and communities. The highest death-rate was recorded amongst the Hindus (22·6) whilst the lowest was amongst the Buddhist (1·1). The death-rates amongst the Muhammadans and Christians were (20·0) and (13·0), respectively, and that among other classes was (20·1).

8. Verification of the registration of vital occurrences.—

Registration of vital occurrences is compulsory in all the 58 municipal towns of the province. 26,803 vital occurrences, as against 28,090 in the preceding year, was checked and verified by the health officers and by the officers of the Vaccination Department. 206 omissions were detected, 128 prosecutions were instituted, and 83 convictions were obtained. This forms only a very small proportion of the births and deaths in the province. The registration of vital statistics in rural areas is not compulsory and the reporting agency, in these areas, as well as in most of the municipalities, is the police. This system, although it prevails in every part of India, remains defective, specially with regard to making correct classification of the causes of deaths. The diagnosis of the diseases lies with chowkidars and as they have to depend entirely on what they are told by the members of the family, it is obvious that classification based on such diagnosis cannot be accurate.

An attempt has been made during recent years to transfer the responsibility of collection, tabulation and verification of the vital occurrences to the health staff of the bigger municipalities. The health officer of the Patna City municipality has been made the registrar of vital occurrences and the results are proving satisfactory. A partial transfer has also been effected in Ranchi, Puri, Gaya, Chapra and Muzaffarpur municipalities where both the municipality and police report these statistics separately. The figures thus supplied by the police and those by the municipal health staff are compared and cases of under and over reporting are verified. It is expected that as more and more municipalities appoint their own health officers, they will be in a position to assume the responsibility of collecting and registering accurate vital statistics.

Verification of vital statistics in rural areas.—In rural areas 33,141 vital occurrences were verified by the vaccination staff as against 45,934 in 1932. Verification of vital occurrences in villages is much more difficult specially in the districts which do not maintain complete health organisations under district health officers. District health officers, where such officers exist, check the figures supplied by the vaccinators, and the Civil Surgeons are able to compare and verify the figures supplied by the police with those furnished by the health officers.

9. Publication of vital statistics.—

The weekly publication of vital occurrences for all the municipal towns in the province with a population of over 20 thousands continued throughout the year.

Weekly epidemic reports from all the districts showing attacks and deaths from cholera, small-pox, plague and influenza were published regularly in the *Bihar and Orissa Gazette* and also in some of the provincial newspapers.

By the publication of these statistics, the general public is kept well informed of the actual state of health of the larger towns and of the prevalence of diseases in the districts. Publicity of this kind, not only helps to demonstrate the special utility of vital statistics but also creates an interest in the mind of the people for general public health.

CHAPTERS III AND IV.

*State of Public Health in the Province and History of the chief diseases—Epidemiology.***1. Comparative incidence of the chief diseases.—**

The undermentioned statement compares the ratios under the chief heads of mortality in 1933 with the average ratio of the previous ten years :—

	Urban.		Rural.		Combined.	
	Ten years' average.	1933.	Ten years' average.	1933.	Ten years' average.	1933.
1	2	3	4	5	6	7
Cholera	1·0	0·3	1·5	0·5	1·5	0·5
Small-pox	0·5	1·6	0·4	1·1	0·4	1·1
Plague	0·4	0·01	0·2	0·04	0·2	0·04
Fevers	8·2	6·2	16·4	15·6	16·1	15·2
Dysentery and Diarrhœa ...	0·8	0·7	0·5	0·4	0·6	0·4
Respiratory diseases	0·5	0·6	0·2	0·1	0·2	0·2
Injuries	0·4	0·4	0·3	0·3	0·3	0·3
All other causes	5·1	4·3	4·4	4·3	4·4	4·3
Total	16·9	14·3	24·0	22·4	23·7	22·1

It will appear from the above table that there was a reduction in the number of deaths from all causes except small-pox, cholera and respiratory diseases. The primary cause of increased mortality in the year under report from 20·6 in 1932, to 22·1 in 1933, was due to larger number of deaths from small-pox. There was a slight increase in the number of deaths due to cholera and respiratory diseases under which 0·5 and 0·2 deaths per mille were reported as against 0·2 and 0·1 in the preceding year.

Although there has been some reduction in the mortality rate from fevers during the last decennium it cannot be attributed to any organised anti-malarial measure in the province. Malaria is quite common in many of the districts but in the absence of any arrangement to report correct diagnosis it is not possible to say what percentage of deaths under fevers is definitely due to malaria.

The incidence of tuberculosis is reported to be increasing in many of the bigger towns. This disease together with pneumonia and influenza, is mainly responsible for the increased death-rate from respiratory diseases. Cases of tuberculosis are commonly met with, particularly in towns which are considered to be health resorts. Control of tuberculosis can only be hoped for by rousing the sanitary consciousness of the people.

2. Cholera statistics.—

The death-rate from cholera rose from 0·2 per mille in 1932 to 0·5 per mille in 1933. The districts of Cuttack and Balasore again reported the highest death-rate from cholera, viz., 3·8 and 1·5, respectively. Amongst the towns Kendrapara (3·7), Jajpur (3·4) and Colgong (2·8) reported highest death-rates.

3. Cholera in the Province.—

The total number of deaths from cholera in 1933 was 17,514 as compared with 9,348 in 1932. The districts in South Bihar and Chota Nagpur were comparatively free from cholera but the districts of North Bihar, specially

Darbhanga, Champaran and Muzaffarpur had a mild epidemic of cholera at the close of the monsoon. The disease started early in an epidemic form in the districts of Cuttack and Balasore and it was prevalent more or less throughout the year. The Civil Surgeon of Cuttack with the help of the local bodies took prompt measures to control the epidemic. 20,000 people were inoculated against cholera and excellent results were obtained from the use of cholera-phage in certain areas of the district. The epidemic of cholera in the district of Balasore, which caused 1,442 deaths, remained a special source of anxiety to the department for the most part of the year. Extra grants had to be made to the district board of Balasore for the appointment of epidemic doctors over and above the services of two doctors lent from the Government public health cadre. At Puri both the Snan and Rathjatra festivals passed off fairly successfully and the sanitary measures taken in the town under the energetic supervision of the health officer proved quite satisfactory. No epidemic in the district followed the *mela*.

4. Cholera preventive measures.—

With the growth of public health organisations in districts there is rapidly being created, in those districts which employ health officers, an efficient and well trained staff to deal with outbreaks as soon as they occur. Twelve district boards maintain now health officers with a suitable subordinate health staff. There are fewer demands for extra epidemic doctors to combat cholera in these districts. But when the outbreak becomes serious and widespread and the district staff are unable to cope with the situation, officers are detailed from this department. Besides, temporary doctors are also employed by the Government to assist the local bodies in times of stress. Demands for epidemic doctors are usually numerous from the districts which have no permanent health organisations.

Stock of disinfectants such as bleaching powder and permanganate of potash and also Kaolin for use for the treatment of cholera cases are kept in reserve by the district boards. If required the Civil Surgeons requisition for these disinfectants and drugs from the Director of Public Health, Bihar and Orissa; the local bodies also get supplies of disinfectants from Government in cases of emergency. Government also maintain a large stock of cholera vaccine at the Vaccine Depot, Namkum. The Superintendent, Vaccine Depot, is generally asked by telegram to despatch vaccine immediately wherever it is required. The number of doses of cholera vaccine issued has steadily increased and from 1928, 240,000, 656,300, 731,000, 666,510, 241,235 and 458,822 doses were supplied each year up till 1933. This preventive measure is getting more and more appreciated and now hardly any objection is raised to its use even in the remote villages. There are now indications to show that people of their own accord offer themselves for inoculations at the approach of the cholera season. Prophylactic inoculations against cholera are extensively carried out at all the important *melas* and this measure proved specially effective in preventing the outbreak of cholera epidemic after the Rath Jatra festival. The use of bacteriophage for the prevention and treatment of cholera is dealt with in Chapter XV.

5. Small-pox.—

The total number of deaths from small-pox during 1933 was 42,674 as compared with 16,466 in 1932. As it was mentioned in the last year's report, the years 1925, 1926 and 1927 were severe small-pox years and another severe outbreak was apprehended in 1933-34. This forecast proved correct and the year 1933 turned out to be a bad small-pox year when the mortality rate suddenly increased from 0.4 in 1932 to 1.1 in 1933.

The urban areas suffered more from small-pox than the rural areas and the towns of Gaya, Motihari and Ranchi reported highest death-rates, namely 13.3, 4.3 and 3.8, respectively. Amongst the rural areas the highest death-rates were registered in the districts of Puri (4.3), Cuttack (2.3) and Gaya (2.5) whilst the districts of Angul, Manbhum and Singhbhum returned lowest death-rates, namely, (0.01), (0.1), and (0.1), respectively.

Primary vaccination is carried on in all the districts, but wholesale vaccination and revaccination are deemed essential for the prevention of the occurrences of this disease. Until 1931 primary vaccination was only compulsory in the municipal areas and in the rural areas of the districts of Patna, Muzaffarpur and Hazaribagh. Compulsory primary vaccination was then extended to the districts of Champaran, Purnea, Bhagalpur, Darbhanga and Gaya. All these districts except Hazaribagh have health organisations under district health officers. With the introduction of compulsory vaccination, and the extension of sections 92 to 96 of the Local Self-Government Act the control has been handed over to the local bodies and the health officers of Muzaffarpur, Purnea, Darbhanga, Patna, Champaran, Bhagalpur and Gaya have been appointed Superintendents of vaccination. Control has also been handed over to the districts of Puri, Cuttack and Balasore and the health officers of these districts have been appointed Superintendents of vaccination. The inspection of vaccination is now done by the district health staff in these districts and Government vaccination inspecting staff have been withdrawn. The Civil Surgeons still exercise the powers of the Superintendent of vaccination in places where the local bodies have no health officers. Government exercise control over this important public health measure through the Assistant Directors of Public Health who make annual vaccination inspection tours in their circles and submit a special report on this work. To make supervision of vaccination still more effective, a Special Vaccination Inspector has been appointed and placed under the Assistant Directors of Public Health of North Bihar and Chota Nagpur and Orissa Circles. It is hoped that in the near future all the districts of the province will take over direct control of the administration of this important public health measure.

It is a known fact that vaccination prevents and limits outbreaks of small-pox, but still the rate of mortality from this disease tends to show sharp rises at times in this province. This is due to the fact that a large number of children escape even primary vaccination and thus remain unprotected. Besides, the immunity conferred by vaccination gradually declines with the passage of time, with the result that protection passes off within 6 to 7 years. It is, therefore, considered essential that primary vaccination should be compulsory throughout the province and re-vaccination should also be made compulsory. Vaccine lymph manufactured at the Vaccine Depôt, Namkum, is supplied throughout the province.

6. Plague statistics.—

One thousand six hundred and thirty-five deaths occurred from plague in the province during the year under report. The mortality rate for the year 1933 was 0·04 as compared with 0·09 in the preceding year or one-fifth of the decennial average (0·2). There are certain isolated tracts in the districts of Saran, Champaran, Muzaffarpur, Darbhanga and North Monghyr where plague is endemic. The disease appears almost every year in these places with the approach of the winter season, reaches its maximum intensity during February and March and declines with the advent of the summer months. During the year under report the districts of Muzaffarpur with 616 deaths recorded the highest death-rate (0·2) followed by Darbhanga (0·2), Saran (0·1) and Monghyr (0·05).

The usual measures of rat destruction, inoculation and evacuation followed by disinfection of floors and lower portion of the walls of the infected houses with kerosene oil emulsions were carried out. The reserve epidemic doctors of the Government Public Health cadre were available for plague duties in the affected areas. 25,154 anti-plague inoculations were performed.

7. Dysentery and diarrhoea.—

Seventeen thousand and sixty four deaths were recorded as against 15,727 deaths in the preceding year, and the mortality rate 0·4 remained the same as against the decennial mean of 0·6. Orissa division again registered 14,659 or 85 per cent deaths out of the total mortality of 17,064 from this group of

diseases. The towns which registered highest death-rate were Puri (6.9), Sambalpur (2.6) and Kendrapara (2.5). These diseases are particularly prevalent in Orissa and is probably due to the climatic conditions and to a large extent associated with the bad state of water supplies and defective sanitation in these districts. The arrangement for a piped water-supply in the Puri town is nearing completion. This improvement in the water-supply, it is hoped, will result in the decrease of the incidence of these diseases in that area.

CHAPTER V.

Fairs and Festivals.

1. The towns of Puri, Gaya and Deoghar are regarded as sacred places of the Hindus by the people of India. These places attract large numbers of pilgrims every year. Besides these a great many *melas* are held every year in different parts of the province. Some are of purely local interest and are attended by the people of the district in which it is held and of the adjoining districts. Many of these *melas* are cattle fairs held in connection with religious festivals. The Pitripaksh *mela* usually held in the month of September in Gaya attracts the largest number of pilgrims in South Bihar. The biggest cattle fair, usually known as Harihar Chhatra, is held annually in the month of November at Sonapur in the district of Saran. This lasts for a fortnight and is attended by about one and half lacs to 2 lacs of visitors.

2. The Snan and Rathjatra festivals were held in Puri on the 8th and 25th June 1933 respectively. About 90,000 pilgrims visited Puri during the car festival. Sanitary arrangements and preventive measures against cholera epidemic were undertaken as usual. Three medical officers of health and three sub-assistant surgeons were deputed by the Director of Public Health, and two temporary medical officers were appointed by the Puri municipality for the occasion.

All the public wells of the town numbering 116 were thoroughly desilted and disinfected before the festival and again all these wells as well as the wells in the lodging houses and a good many of private wells also were treated every fourth day with chlorinated lime. Two of the sacred tanks, namely, Narendra and Markanda, which are much used by the pilgrims were also treated with chlorinated lime. All the wells in the Baradanda road from the municipal market to the Gundicha house, the wells at the railway station and some of the wells on the Cuttack-Puri Road were regularly treated with cholera bacteriophage.

Out of 31 important wells in Puri, 5 were fitted with petrol pumps with over-head tanks and taps and 9 with hand-pumps by the Engineering branch of the Public Health Department. Of the remaining 17 wells, 5 were fitted with hand-pumps with over-head tanks and taps and 12 with only hand-pumps at the cost of the municipality. Special arrangements were made for prompt reporting of the cases of infectious diseases occurring in Dharamshalas, lodging houses and private houses by the house owners and medical practitioners. Ambulance carts were posted at different places for the prompt removal of cholera patients to the hospital. Anti-cholera inoculations were given in the different parts of the town as well as at the railway station. The number of anti-cholera inoculations administered during this festival has steadily increased since 1927 and 38,384 inoculations were performed in 1933. From the 24th June all cholera contacts were treated with choleraphage. Choleraphage was also then distributed freely among the pilgrims through the drinking water. It is gratifying to note that although sporadic cases of cholera were occurring at the time in the district, only 8 cases of cholera occurred in the Puri town during the whole of the *mela* period as compared with 66 cases in the previous year. Of these only one died as against 11 in the preceding year.

3. The Pitripaksh *mela* at Gaya was held from 4th to 19th September 1933. 63,000 pilgrims visited the place during the *mela* period. The pilgrims were mostly accommodated in the lodging houses and Dharamshalas, and the usual sanitary arrangements were made. The lodging houses and the wells in

the area including the water reservoir were regularly disinfected. Water-supply to the railway station and to the old town was augmented. The health of the town remained satisfactory all through the *mela*. Not a single case of cholera or any infectious disease or serious illness was reported.

4. The Sonapur fair usually known as the Harihar Chhatra commenced from the 29th October 1933 and lasted for a fortnight. About 3 to 4 lacs of people visited the *mela* during this period. About a lac and a half of pilgrims assembled on the bathing day, that is on the 2nd November 1933. Special sanitary arrangements as in the previous years were made by the Public Health Department in conjunction with the district board authorities. All the wells in the *mela* area were dewatered and chlorinated twice before the *mela* commenced, but they were treated with choleraphage regularly during the *mela* period. The main supply of drinking water was through the deep tube wells fitted with pumps and over-head tanks, from which it was distributed by means of pipes and hydrants throughout the *mela* area as in last year. Four new taps in the Bailhatta were put in, in accordance with the recommendations of the previous year. These proved very useful to the people camping in this area. Only three cases of cholera were reported from the *mela* area. They were all removed to the temporary infectious diseases hospital where they all recovered.

Propaganda lectures illustrated with magic lantern slides on the causation and prevention of infectious and contagious diseases were delivered by the medical officers of the Public Health Department. The danger of contracting and disseminating venereal diseases by the public visiting the *mela* through the prostitutes that gather in large numbers on this occasion has long been felt. A special attempt was made this year by the Public Health Department to run an anti-venereal disease campaign during the *mela* period. Census taken of the prostitutes with their names, age and place of last residence revealed the presence of 268 prostitutes camping in the *mela* area. Popular lectures illustrated with magic lantern slides, explaining the modes of infection and methods of prevention of the venereal diseases were delivered at different places. Packets of potassium permanganate and prophylactic ointments with instructions regarding their proper use were also distributed among the prostitutes camping in the *mela* area.

5. Of the other important *melas*, Bhadra Purnima at Deoghar may be mentioned. 2,862 pilgrims visited the place on this occasion. The usual sanitary and water-supply arrangements made for it were found satisfactory. A special Medical Officer of Health from the Public Health Department was detailed for the *mela* period. No case of cholera or other infectious disease was reported.

Besides, numerous other fairs are annually held in the province. All these are of local interest. In the districts where health organisations exist, sanitary arrangements are made on these occasions by the local bodies under the direct supervision of the district health officers. The important *melas* are also attended by the Assistant Directors of Public Health who help the local bodies in organising sanitary arrangements. Special epidemic doctors are detailed by the Public Health Department whenever their services are requisitioned.

CHAPTER VI.

Urban Sanitation.

1. Thirty-two out of the 58 municipalities in the province were inspected by the Assistant Directors of Public Health in the year under review and reports on these inspections were duly submitted to Government. The financial condition of these municipalities remains the same and there seems to be very little prospect of employment of suitably qualified health officers in them.

So far the municipalities in the towns of Gaya, Patna, Puri, Bhagalpur and Darbhanga have employed full-time qualified health officers. The three first named health officers are paid by Government while the latter two receive their pay from the municipal funds.

The necessity of appointment of health officers in the larger municipalities such as Muzaffarpur, Chapra, Cuttack, Ranchi, Monghyr and Arrah have long been felt and this point was also emphasised in the public health report of last year. The Assistant Directors of Public Health have recommended time and again in their inspection reports, the desirability of appointing health officers for these municipalities. Full-time health officers are considered essential for the efficient control of the health staff and effective performance of the sanitary duties. Sanitary inspectors, by reason of their limited training, are generally ill fitted to perform the work of a health officer, or to cope with the epidemics when they do occur in the town. It is from such municipalities that constant demands come for the services of Government epidemic doctors. This fact has long been impressed upon the municipal commissioners and as a result of persistent efforts, the municipalities of Cuttack and Ranchi have just agreed to engage whole-time health officers.

As already mentioned in the last year's report, the recommendation of the Royal Commission on labour for the appointment of fully qualified health officers in the municipalities cannot yet be given effect to, owing to the poor financial condition of the municipalities. But an alternative proposal to consider the suitability of appointing sub-assistant surgeons with special public health training (L. P. H.) as health officers of smaller municipalities, which cannot pay for fully qualified health officers, has been receiving the attention of Government. They may be useful for the municipalities of subdivisional towns.

Ordinarily, recommendations of Assistant Directors of Public Health involving small expenditure are usually carried out by the municipalities themselves but bigger schemes for improved drainage, etc., have yet to wait till the finances of these bodies improve.

2. Expenditure on sanitation in municipal towns.—

The statement below shows the receipts and the expenditure for sanitary purposes during the year 1932-33 as compared with those of the previous year :—

Number of municipalities.	Total receipt including opening balance.		Heads of expenditure.	1931-32.	1932-33.	Percentage of expenditure to the total receipts.	
	1931-32.	1932-33.				1931-32.	1932-33.
1	2	3	4	5	6	7	8
	Rs.	Rs.		Rs.	Rs.		
58	60,14,792	50,36,524	Conservancy ...	11,25,659	10,81,526	18·7	21·5
			Drainage ...	1,74,761	2,12,820	2·9	4·2
			Water-supply ...	5,85,907	3,44,021	9·7	6·8
			Vaccination ...	14,876	14,935	0·2	0·3
			Epidemics ...	19,952	10,566	0·3	0·2
			Markets and fairs ...	53,973	42,019	0·8	0·8
			Other sanitary charges	3,178	3,281	0·05	0·06
			Public Health staff ...	44,560	49,242	0·7	1·0
			Total ...	20,22,866	17,58,410	33·6	34·9
			*Contagious diseases hospitals.	2,35,865	2,20,883	...	...

*This represents cholera hospitals and leper asylums, etc. An expenditure of Rs. 2,20,883 has been incurred in 1932-33. The expenditure is mainly met from Government grants.

3. Chief Sanitary Works in municipal towns.—

The details of expenditure under this head are dealt with in the report of the Superintending Engineer, Public Health Circle.

CHAPTER VII.

Rural Sanitation.

1. The health organisation schemes continued to function during the year in the following districts, namely Patna, Gaya, Shahabad, Muzaffarpur, Saran, Champaran, Darbhanga, Bhagalpur, Purnea, Cuttack, Puri and Balasore. Each of these districts has a fully qualified health officer with the requisite number of subordinate health staff. Attempts have been made in some of the districts to divide the district into circles and to post an Assistant Health Officer of L. M. P. qualification in the subdivisional headquarters.

The services of Government paid health officers have been lent to the district boards of Gaya, Muzaffarpur, Saran, Bhagalpur and Champaran, while the district boards of Cuttack, Puri and Balasore receive contribution from Government equivalent to half of their total expenditure on health schemes. The district boards of Darbhanga and Purnea pay their health officers entirely from their own funds. The health organisation scheme was also introduced to the district of Shahabad during the year under report to which the services of a Government paid health officer, were lent.

These health officers also examine the health of the school children in primary and middle English schools at places where there are no high schools. The latter are generally visited by the Government school medical officers. This is being done as an experimental measure in some of the districts, but in view of the usefulness of the scheme it is hoped to extend this system to all the districts.

Control of vaccination was entirely vested with the Civil Surgeons who were also the Superintendents of Vaccination and Special Government Inspecting Officers (Inspectors and Sub-Inspectors) had to be employed to check the work of the vaccinators. With the introduction of the health organisation scheme, it was thought desirable to transfer the responsibility of control of vaccination to district boards. This was also the view of the retrenchment committee. Consequently the district boards with health organisation schemes were handed over the control of this important public health measure at the close of the previous year and subsequently Government vaccination inspecting staff were withdrawn and the health officers have been appointed Superintendents of Vaccination in these districts.

The Bengal Vaccination Act has been introduced in the following districts, viz., Patna, Gaya, Muzaffarpur, Saran, Champaran, Darbhanga, Bhagalpur, Purnea, Hazaribagh and Puri. Efforts are being made to extend the Act to as many districts as possible.

A health organisation scheme is a necessity for every district board. The first essential of the scheme is the appointment of a fully qualified health officer. Efficient supervision of the work of the subordinate health staff and the effective control of recurrent and widespread epidemics can only then be made possible. The districts which have adopted this scheme have definitely made fewer demands upon Government for epidemic doctors. It is to be regretted that the suggestions for the employment of health officers in the districts of Monghyr, Manbhum, Ranchi and Hazaribagh have not been given effect to by the boards. Government agreed to pay for their salaries and the boards were called upon to maintain the minimum number of subordinate health staff and to meet the travelling allowances of the health officers. In view of the advantages of a suitable health organisation scheme, hopes are still entertained that these boards will be agreeable to adopt it in the near future.

The other district boards which have no proper health organisations usually maintain a small health staff. The number of the health staff is increased temporarily during the time of epidemics. But as soon as an epidemic becomes

serious they generally requisition for Government epidemic doctors. This means delay and the districts which have no health officers are usually slow to take immediate steps to combat epidemics.

2. Expenditure on sanitation by district boards.—

The following statement shows the receipts and expenditure of district boards under the principal headings of sanitation :—

Number of district boards.	Total receipts including opening balance.		Heads of expenditure.	1931-32.	1932-33.	Percentage of expenditures to the total receipts.	
	1931-32.	1932-33.				1931-32.	1932-33.
1	2	3	4	5	6	7	8
	Rs.	Rs.		Rs.	Rs.		
19	1,59,51,150	1,55,31,476	Conservancy ...	2,99,345	2,74,754	1·8	1·8
			Drainage ...	5,404	4,059	0·03	0·03
			Water-supply ...	1,56,155	1,45,610	0·9	0·9
			Vaccination ...	25,858	32,357	0·1	0·2
			Epidemics ...	65,980	47,263	0·4	0·3
			Markets and fairs ...	17,973	9,360	0·1	0·06
			Other sanitary charges...	...	...	...	...
			Total ...	5,70,715	5,13,903	3·5	3·3

CHAPTER VIII.

Malaria.

1. Fever statistics.—

574,548 deaths were reported from fever during the year. The term 'fever' is generally used for every condition in which the outstanding sign is a rise of temperature. It is, therefore, clear that malaria alone could not have been the only cause of this large number of deaths, although the disease undoubtedly accounts, directly or indirectly, for the bulk of these deaths.

The death rate for fever during 1933 was 15·2 as compared with 15·0 in 1932, the decennial average being 16·1. The highest mortalities were recorded in the districts of Angul (22·6), Purnea (21·3) and Balasore (19·7). Amongst the towns, Raghunathpore (17·1), Gaya (16·6) and Revelganj (16·0) reported highest death rates. Large portions of Orissa and almost the entire districts of Singhbhum, Purnea and North Bhagalpur are reported to be malarious. Following the recommendations after an anti-malaria survey carried out in the municipal area of Purnea, a few centres for the treatment of malaria were opened in the town. These were attended by a special doctor appointed by the municipality, who also carried out house to house visits with a view to induce the sufferers to undertake proper treatment.

Dr. K. D. Mitra of the public health cadre carried out anti-malarial survey in Madhubani from the middle of August 1932 under the supervision of Dr. A. N. Chatterji, Offg. Assistant Director of Public Health, North Bihar Circle. This survey was completed by February 1933 and a special report on this work is under print.

2. Sale of quinine.—

Sale of quinine treatment in the various post offices in the province has been in force for many years. These treatments are supplied to the post offices by the Civil Surgeons, who obtain their requirements from the Presidency Jail at Calcutta, where the products of the cinchona plantations in Bengal are made up into tablets.

Twenty tablets packed in small glass tubes constitute one treatment. These treatments are now sold by the post offices at $5\frac{1}{2}$ annas per treatment, but the amount purchased annually cannot be regarded as satisfactory.

344·7 lbs. of quinine sulphate were sold during the year under report as against 455·3 lbs. in the previous year. The largest quantities were taken by the districts of Purnea, Cuttack, Santal Parganas, Balasore, Bhagalpur and Muzaffarpur.

3. Spleen Census.—

The Assistant Director of Public Health, Chota Nagpur and Orissa Circle, carried out, as in the previous years, a spleen census during his vaccination tours in the districts of Ranchi, Chaibassa, Sambalpur, Cuttack, Angul, Puri, Balasore and Manbhum. 15,348 children from 1,057 villages were examined. Out of these 1,574 children collected from 467 villages showed enlarged spleens. The districts of Angul, Balasore and Ranchi revealed the greatest incidence where 414, 250 and 537 children, respectively were found suffering from enlargement of spleen out of 1,778, 990 and 3,583 children examined.

CHAPTER IX.

Maternity and Child Welfare.

The Bihar and Orissa Maternity and Child Welfare Society continued to work through a Managing Committee with Lady Sifton as the President, the Inspector-General of Civil Hospitals as Honorary Secretary and the Accountant-General, Bihar and Orissa, as Honorary Treasurer. Over and above the three centres at Patna, one centre at each of the following places, viz., Muzaffarpur, Darbhanga, Monghyr, Cuttack, Balasore, Puri, Sambalpur and Manbhum rendered useful service throughout the year.

The subject is dealt with by the Inspector-General of Civil Hospitals.

CHAPTER X.

School Hygiene and Medical Inspection of School Children.

1. The Government maintain a special staff of officers for the medical examination of scholars of the High English Schools since 1920. This system was subsequently extended to the Middle English Schools at places where there is also a High English School.

There is one School Medical Officer of Assistant Surgeon grade and one Assistant School Medical Officer of Sub-Assistant Surgeon class in each of the five divisions of the province. There is also a Lady School Medical Officer for the girls' schools of the province.

These officers visit all the High Schools and most of the Middle English Schools in their respective divisions.

2. The medical inspection of scholars.—

All new scholars admitted to the school since the previous visit of the School Medical Officer are thoroughly examined and a complete medical history of each new entrant is recorded on the prescribed form. All scholars found to be suffering from physical defects at a previous inspection are re-examined and a further note on the particular defects recorded. At the end of the inspection, parents or guardians of boys found to be suffering from physical defects are informed of the particular defects the boy is suffering from, and they are recommended to consult their medical attendants or take the child for treatment to the nearest dispensary. This information is given on a prescribed form. Another form is used for the poorer children and is addressed to the medical officer in charge of the local hospital or dispensary. The medical officer is asked to note on the counterfoil of the form, the treatment the boy has received. During the year under report an attempt was made to start school clinics attached to each of the divisional hospitals which were attended by School Medical Officers during their stay at the headquarter stations. The children requiring treatment at the headquarter towns were taken there and results of the treatment noted in a special register maintained for the purpose.

The following is a statement showing the number of children examined by each of the School Medical Officers and the number recommended for treatment.

				Number of children examined.	Number recommended.
Patna Division	...	...	...	2,681	1,224
Chota Nagpur Division	...	...	...	2,726	1,132
Bhagalpur Division	...	...	...	1,861	1,675
Tirhut Division	...	...	...	3,343	1,276
Orissa Division	...	...	...	2,502	1,462

The Lady School Medical Officer examined 492 girls, out of whom 344 or 69.9 per cent were found defective or diseased.

From the above statement, it will appear that out of 12,113 boys examined 6,719 or 55 per cent suffered from some kind of minor ailments. The majority of them had skin troubles, enlarged glands and caries of the teeth. 2.6 per cent of the boys were found suffering from common eye diseases, e.g., trachoma, conjunctivitis, blepharitis and corneal opacity, whilst 12.3 per cent of them suffered from visual defects due primarily to errors of refraction. 1.8 per cent of the boys had heart troubles and 24 were diagnosed as suffering from pulmonary tuberculosis. 10 cases of leprosy, mostly in the Orissa districts and a few in the district of Manbhum were also detected.

Lectures on Hygiene.—The School Medical Officers also deliver annually ten lectures on Hygiene, Sanitation and the epidemic diseases common in India to the students of the Xth and XIth classes of the High English Schools. These are mostly illustrated with magic lantern slides. Attendance at these lectures is compulsory but as hygiene is neither a compulsory nor an optional subject in the Matriculation examination, the lectures do not receive quite the attention they deserve. They, however, afford an opportunity for the propaganda of knowledge and information on public health and ought to produce some beneficial results. During the summer vacation holidays, these officers devote themselves to special propaganda work by arranging lectures and demonstrations for the village Gurus, Maulavis and Sub-Inspectors of schools in different selected centres of the division.

In September 1933 a special cinema film depicting causes and prevention of malaria, defective vision, infant and maternal mortality and school hygiene was shown to the students at Ranchi by the School Medical Officer, Chota Nagpur Division. The films were hired from the Red Cross Depot, Simla. The interested public also witnessed the show and the demonstration proved very successful.

The school and hostel buildings are regularly inspected by the School Medical Officers during their visits to each school. These inspections have led to improved sanitation and better provision of urinals, latrines and drinking water-supply for both day and night scholars.

CHAPTER XI.

Health Propaganda.

1. The Officer in charge of the Public Health Bureau did propaganda work as usual during the year. Pamphlets and posters were issued to the local bodies and popular articles on public health subjects were contributed to the press.

A leaflet based on the investigations carried out at the Public Health Laboratory, Patna, regarding the value of the rice-water as to its vitamin 'B' contents which acts as an antineuritic factor was issued by the Public Health Bureau, Bihar and Orissa. Inclusion of rice-water in the diet was strongly advocated in the leaflet which was widely distributed among the schools and the local bodies of the province.

The Assistant Directors of Public Health also gave short lectures on sanitation and hygiene during their vaccination inspection tours in rural areas. 381 such discourses were held during the year. They are also provided with a magic lantern and complete sets of slides on all important topics of health.

Lectures illustrated with magic lantern slides and demonstrations on public health subjects are also held at all important melas and at the meetings of the co-operative societies. The Assistant Director of Public Health, Chota Nagpur and Orissa Circle, organized a health propaganda during the S. P. C. A. Exhibition held at Ranchi in February 1933. Specimens of disease-carrying germs and insects were demonstrated and other popular health exhibits were also put up for show.

2. Red Cross Society.—

The Red Cross Health Museum continued to attract visitors to the museum and it is estimated that 130,000 people visited the museum in 1933. The Director of Public Health was able to detail one of the staff to attend the Museum and explain the exhibits to the visitors. This was done practically throughout the year.

The Anti-tuberculosis Sub-Committee formed under the auspices of the Society continued to direct campaigns against the spread of tuberculosis in the province.

CHAPTER XII.

Public Health Administration.

1. The statement below shows the receipts and expenditure under the head 33—Public Health (Medical) for the years 1931-32 and 1932-33 :—

Heads.	Receipts.		Heads of expenditure.	1931-32.		1932-33.	
	1931-32.	1932-33.		Budget provision.	Expenditure.	Budget provision.	Expenditure.
1	2	3	4	5	6	7	8
	Rs.			Rs.	Rs.	Rs.	Rs.
Sale-proceeds of sera and vaccine, etc.	30,821	...	Public Health Establishment.	2,25,812	2,04,009	1,92,042	1,92,726
			Medical examination of scholars and teaching of hygiene in high schools.	42,543	38,744	38,574	36,851
			Bubonic plague ...	5,000	6,667	5,000	3,758
			Malaria ...	20,500	13,986	15,600	6,931
			Other epidemic diseases	1,08,164	84,063	1,11,800	63,508
			Publicity Campaign ...	2,266	1,823	1,773	1,636
			Public Health Laboratory.	15,080	12,669	14,499	16,312
			Angul ...	4,460	2,346	2,870	1,976
			Total ...	4,23,825	3,64,307	3,82,158	3,23,698

All requisitions of the Director of Public Health were met by the Government and funds were made available in most cases in spite of the financial stringency.

2. The three Assistant Directors for Public Health, one for South Bihar Circle, with headquarters at Patna, one for North Bihar Circle, with the head-quarter station at Muzaffarpur, and the third, for Chota Nagpur and Orissa Circle, with his headquarters at Namkum, in the Ranchi district, continued to work as in previous year.

The three Assistant Directors of Public Health are employed to investigate into the epidemics, suggest measures of control and to see that the actions taken are adequate to combat the epidemic. They also supervise the permanent prophylactic measures, for example, vaccination, cholera inoculation, etc.

They inspect and report on all nuisances occurring in their areas and a systematic inspection of all district boards, municipalities, union boards and high schools, also the fairs and melas are included in their legitimate duties. They also do propaganda work by lectures and magic lantern demonstrations. Their supervision and expert advice have done much to assist the local bodies towards improvement of all sanitary matters that may prejudice the health of the people for example, drains, water-supply, disposal of refuse and excreta, etc.

There are five School Medical Officers of the Assistant Surgeon grade and five Assistant School Medical Officers of the Sub-Assistant Surgeon class for the five divisions of the province. There is also a Lady School Medical Officer for the girls' schools. She was also appointed during the year as a Medical Inspector of factories in accordance with the recommendation of the Royal Commission on Labour to examine the health of the female employees of the factories in Patna.

The School Medical Officers were placed under the administrative control of the Assistant Directors of Public Health during the beginning of the year under report with a view to ensure closer supervision over their work.

There is a permanent staff of reserve medical officers of health of the Assistant Surgeon grade available to be detailed on demand to any district to combat spread of communicable diseases such as cholera, small-pox, plague, malaria, tuberculosis and epidemic dropsy.

Epidemic doctors of Sub-Assistant Surgeon class are also employed temporarily to help the local bodies in controlling serious epidemics in the districts. One hundred vaccinators are appointed to be detailed in the districts, who, in addition to vaccination work, are trained to carry out disinfection during epidemics.

There is a medical officer of the Assistant Surgeon grade who is in charge of the Public Health Bureau attached to the office of the Director of Public Health. He contributes popular articles to the press on public health subjects. Pamphlets and posters are distributed to the local bodies. He delivers lectures on hygiene to the police probationers and constables and at melas and fairs with the aid of magic lantern slides. He is also the Health Officer of the Patna Administration Committee and Personal Assistant to the Director of Public Health.

Six medical officers of the Assistant Surgeon grade of the Government public health cadre have been lent to the district boards of Muzaffarpur, Saran, Champaran, Gaya, Bhagalpur and Shahabad to work as health officers of the district boards.

The services of three medical officers of the same grade have also been lent to the municipalities of Gaya, Puri and Patna to work as health officers.

A medical officer of the Assistant Surgeon grade works as Chemical Analyst at the Public Health Laboratory where articles of food and water are analysed.

A medical officer of Assistant Surgeon grade also works as Superintendent of Vaccine Depot at Namkum. Vaccine lymph is manufactured and distributed throughout the province from this depot.

CHAPTER XIII.

Vaccination.

The Annual Vaccination Report is submitted as an annexure to this report.

CHAPTER XIV.

Other Public Health Services.

1. Jharia Mines Board of Health.—

The Jharia Mines Board of Health controls the sanitation of Jharia and the neighbouring mining areas which extend over the whole of the Dhanbad subdivision except the Dhanbad municipality. According to the census of 1931, the population of this area is 504,736 and the estimated population for 1933, excluding the Dhanbad municipality is 516,164.

A separate statement is appended showing the incidence of epidemic diseases during the year. 131 deaths occurred from cholera, small-pox and influenza amongst the colliery population of about 128,241.

28, 74 and 29 deaths occurred from cholera, small-pox and influenza respectively, out of a population of 516,164 giving death-rates of 0·05, 0·14 and 0·07 from these diseases as against 0·06, 0·04 and 0·05 of the previous year.

Jharia Drainage Scheme.—

The scheme for the construction of the major drains in Jharia was taken over from the district board in 1931 and a sum of Rs. 12,240 was allotted by the Jharia Mines Board of Health for its completion. At the end of July 1933, the southern outfall was completed whilst the eastern outfall is under construction.

Water-supply.—

In the course of the year under report, five collieries were connected to the Jharia Water Board mains, bringing the total number of connected collieries to 173. Ten working collieries still remain unconnected. They are small collieries usually with no resident labour force. The Board temporarily reserved 13 tanks for drinking water-supply during the cholera season as precaution against the spread of this disease.

Sanitation.—

Two rubbish lorries for carrying the refuse to the dumping ground were maintained throughout the year in Jharia town, but in other coal-field areas, buffalo carts are still in use. 120 public latrines were maintained by the Board during the year.

Maternity and Child welfare.—

The work in connection with the maternity and child welfare scheme was continued as usual. The services of two lady health visitors and five midwives were maintained throughout the year. They attended labour cases and supervised ante-natal and post-natal conditions and also looked after the newly-born babies. Indigenous *dais* continued to receive practical training in conducting labour cases under the personal supervision of the Board's midwives. Some of these *dais* were also granted certificates after an examination by the Chief Medical Officer of the Board.

Leprosy.—

The Board allotted Rs. 1,500 for leprosy relief work. The leprosy staff, namely, one doctor, three dressers, one clerk and one cook have remained unchanged. Leprosy clinics were held twice weekly at Jharia, Dhanbad and Katras. 713 new patients attended the clinics and altogether 18,632 treatments were given at these clinics during the year.

A satisfactory progress of the sanitary conditions in the mining areas was maintained throughout the year.

2. Public Health Laboratory.—

During the year 1,612 articles were examined chemically and bacteriologically, as opposed to 1,457 articles in the previous year. Of these 41 samples were received from private individuals or firms for analysis on payment of fees.

1,170 samples of water were examined bacteriologically of which 445 samples were also examined chemically. The following shows the sources and the number of samples :—

Waterworks	...	...	...	...	868
Jails	...	...	...	...	162
Other sources	...	...	...	...	140

Food-stuffs.—The total number of samples examined was 404 as opposed to 353 of the previous year. The samples of food-stuffs were received from 18 districts of the province. No samples were received from the districts of Palamau, Balasore and Angul.

Ghee.—218 samples of ghee were examined out of which 92 or 42·20 per cent were found adulterated or below the standard as against 57·07 per cent of the previous year. 25 samples were found to be of doubtful purity.

Mustard oil.—146 samples of mustard oil were examined out of which 61 or 41·78 per cent were found adulterated or below the standard against 51·04 per cent of the previous year. 11 samples were found to be of doubtful purity.

Sweets.—17 samples of sweets (*mithai*, *puri* and *kachauri*) were examined with a view to find out if they were made of pure ghee or mustard oil. Out of 17 samples, 12 or 70·59 per cent were found to have been made of ghee or oil which was below the standard as against 75 per cent of the previous year.

Milk.—8 samples of milk were examined, out of which 3 samples or 37·50 per cent were found to contain added water.

Atta.—10 samples of atta (wheat flour) were examined, all of which were found genuine. The percentage of gluten varied from 7·2 per cent to 9·75 per cent.

Miscellaneous.—Two samples of butter and three samples of sago were examined for their purity, 7 samples of electrolytic chlorogen, 2 samples of perchlorine and 7 samples of bleaching powder were examined for determination of available chlorine. Two samples of Alumino-Ferric were examined.

4 samples of soda-water were examined bacteriologically and *B. Coli* was found in every sample.

CHAPTER XV.

General remarks.

1. Research Work—Bacteriophage Experiments.—

In view of the encouraging results obtained with cholera phage in the two previous years in Purnea and Muzaffarpur districts of North Bihar, it was decided to continue the experiments in those two districts and to extend them to include the districts of Patna and Gaya in 1933. The arrangements of the last two years were accordingly repeated in these four districts through the district boards concerned. Cholera phage was also used in dealing with the outbreaks of cholera in the districts of Puri, Cuttack and Bhagalpur.

Bihar witnessed another comparatively mild cholera year in 1933. The earlier months of the usual cholera season were comparatively free from epidemics. The intensity of the outbreaks was felt from the middle of July. Even after July the areas south of the Ganges escaped with fewer outbreaks. In the Northern districts, the outbreaks were rather widespread except in Saran. Of the other five districts, the districts of Muzaffarpur and Purnea where bacteriophage was used, recorded comparatively much less deaths, as will appear from the following table.

The following figures are from 1st January to 31st December 1933 as furnished by the health officers :—

				Attacks.	Deaths.
Saran...	...	...	...	306	127
Champan	...	...	...	810	518
Muzaffarpur	...	...	...	931	306
Darbhang	...	...	...	2,042	1,097
Purnea	...	...	...	665	289
Bhagalpur	...	...	...	1,704	1,463

Purnea.—In Purnea district, out of a total of 665 cases, 289 deaths were recorded. The mortality among all cases has been, therefore, 43·4 per cent. Of 665 cases 332 were not treated with phage. Therefore 50 per cent of the total cases were either not treated at all or treated by village doctors and Vaid. Of these 333 cases, 214 died. Therefore the mortality among the cases who did not get cholera phage was 64·2 per cent.

Of the remaining 332 cases who were treated with cholera-phage, only 75 deaths were recorded. This gives a mortality of 22·5 per cent amongst phage-treated cases. The average time taken to stop an outbreak completely after the use of phage was 3·26 days. 63 per cent of the outbreaks were stopped within two days and 84 per cent within seven days. Only 16 per cent continued for more than seven days. The maximum time of 15 days was required in one village only.

Muzaffarpur.—In the Muzaffarpur district out of a total of 931 cases, 306 died indicating a mortality of 32·8 per cent. 580 cases treated with phage had 79 deaths. Therefore only 13·6 per cent. of the cases treated with phage died. The remaining 350 who had either no treatment or had been treated by doctors and Vaidis recorded 263 deaths or 75·1 per cent of such cases died.

It is significant that better results were obtained in Muzaffarpur district where a larger proportion of cases had received the phage treatment.

67 per cent of the outbreaks in Muzaffarpur district were completely stopped within two days and 77 per cent within five days of the use of phage. Only 11 per cent continued for more than five days. These long duration outbreaks were almost entirely confined to the out-of-the-way areas, within the jurisdiction of Bairagnia, Pupri and Belsand thanas where communication was rendered difficult owing to floods.

Patna.—In the Patna district there were fewer outbreaks of cholera. Out of 145 cases, 19 were removed to the Patna General Hospital. 54 were treated with cholera-phage and 73 were either untreated or treated by village doctors or Vaidis. Of the cases treated with phage, 17 or 31·5 per cent died. Of the remaining cases, treated otherwise in the villages, 39 or 53 per cent died.

The duration of the outbreaks was two days in 76 per cent and five days in 92·3 per cent of the total outbreaks. Only in 7·6 per cent of the outbreaks, cases appeared after seven days of application of cholera-phage. The longest duration was 13 days in one scattered village, situated in an island of the Ganges.

Gaya.—In the Gaya district very few outbreaks were recorded. The progress of one outbreak was closely scrutinised by the Assistant Director of Public Health, South Bihar Circle. One night a cholera case was imported at Nawada railway station from Calcutta. He was offered phage by the assistant health officer, Nawada, but the relatives refused to use phage and took him to their village home at Gajra, few miles from Nawada and placed him under a doctor. He died the next day. Two cases soon appeared in the locality and were cured under bacteriophage treatment. The population was given phage. No further case was reported from the village.

The results obtained so far, tend to prove that besides being cheap and easy of administration bacteriophage is better for the prevention and treatment of cholera than the usual methods. The use of bacteriophage has accordingly been extended, as far as possible, throughout the province.

2. Prevention of blindness.—

The campaign launched in the previous year, at the instance of the Hon'ble Minister for Local Self-Government, against the occurrence of preventable eye diseases leading to defective vision and total blindness, was continued by the health officers of Gaya district board and the Patna City municipality. Two eye clinics were opened during the year, in the Patna City municipality area, which were attended by 75 cases. The cases of minor ailments were treated successfully at the clinics, whilst those suffering from serious conditions, were referred to the General Hospital. The case histories of the inmates of the blind school, were examined and their defects were traceable to the following diseases :—

(1) Trachoma and corneal ulcer	...	...	...	7
(2) Small-pox	...	...	...	5
(3) Ophthalmia neonatorum	...	...	...	3
(4) Typhoid	...	...	...	2
(5) Malaria	...	...	...	2
(6) Dysentery	...	...	...	1

It is apparent from this that the cause of blindness can, in most cases, be traced to a preventable condition and timely help could probably have saved these sufferers from lifelong loss of sight.

17 cases of blindness were examined by the health officer, Gaya district board, in the Aurangabad subdivision with similar findings. Two lectures in the City municipality and 5 lectures in Aurangabad subdivision illustrated with magic lantern slides were delivered by the health officers concerned, on the causes and prevention of blindness in India. The importance of washing the eyes with cold water, specially during hot weather, was duly stressed.

3. Inspection of Mines.—

As a result of the recommendation, made by the Royal Commission on Labour, in its report that Provincial and District Public Health Officers should be given the power and duty of inspection of mines in regard to matters of health and sanitation, the Director of Public Health, Bihar and Orissa, and the Assistant Directors of Public Health, South Bihar and Chota Nagpur and Orissa Circles, were appointed under notification no. M.-1265, dated the 20th April 1933, of the Government of India, as the *ex-officio* medical inspectors of mines under section 4 of the Indian Mines Act, 1923.

The whole of Bihar and Orissa was declared to be the area, in which the Director of Public Health, as an Inspector of Mines will exercise his power under the Act. The Assistant Director of Public Health, South Bihar Circle, was allotted the districts of Gaya and Hazaribagh, while the Assistant Director of Public Health, Chota Nagpur and Orissa Circle, the district of Singhbhum.

4. Personal Proceedings and Office.—

During the year under report, the office of the Director of Public Health was held by Lt.-Col. J. A. S. Phillips, I.M.S., from the 1st January to 9th February and then again from 7th October to 31st December. During the remaining period, Major S. L. Mitra, I.M.S., was in charge from the 10th February to 6th October.

Of the Assistant Directors of Public Health, Dr. A. N. Chatterji was in charge of South Bihar Circle from the 10th February to 6th October and Major S. L. Mitra, I.M.S., from the 1st January to 9th February and then again from the 7th October till the end of the year.

Rai Bahadur Dr. J. L. Das remained in charge of the North Bihar Circle, throughout the year, except from the 2nd May to the 31st May, when Dr. A. N. Chatterji held charge of this circle, in addition, to his own duties. Dr. B. P. Mazumdar was in charge of the Chota Nagpur and Orissa Circle throughout the year, who also held charge of the Vaccine Depot, Namkum.

5. Touring.—

During the year, the Director of Public Health was on tour for 23 days and the Assistant Directors of Public Health of South Bihar, North Bihar and Chota Nagpur and Orissa Circles for 138, 186 and 217 days, respectively.

6. Personnel.—

Dr. B. P. Mazumdar, Assistant Director of Public Health, Chota Nagpur and Orissa Circle, performed his duties very satisfactorily. He held charge of the Vaccine Depot at Namkum and was responsible for the prompt despatch of all vaccines to the Civil Surgeons, Health Officers and chairmen of local bodies. Rai Bahadur Dr. J. L. Das, Assistant Director of Public Health, North Bihar Circle, also performed his duties satisfactorily. The work of Dr. A. N. Chatterji was particularly satisfactory in connection with the use of bacteriophage. The accuracy of the statistics on the use of the phage was largely due to his efforts.

Rai Sahib Dr. K. N. Bagchi carried on the work of the Chemical Analyst, as usual, in a very satisfactory manner and Dr. S. K. Chatterji worked at the Bacteriophage Laboratory with enthusiasm and zeal. The work of Rai Sahib Dr. B. Nayak, Health Officer, Puri municipality, was also very satisfactory. He was largely responsible for the successful arrangements, made at Puri, for the car festival.

S. L. MITRA, MAJOR, I.M.S.,
Offg. Director of Public Health.

Annual Vaccination Report of the Province of Bihar and Orissa for the year 1933-34.

1. The statistics in the Vaccination Report are for the financial year, whilst the statistics in the Annual Public Health Report are for the calendar year. This arrangement facilitates the inclusion of the figures, for the complete vaccination season, from October to March, in the Vaccination Report.

2. *Staff.*—Major S. L. Mitra, I.M.S., held charge of the office of the Director of Public Health, Bihar and Orissa, from the 1st April to 6th October 1933, and Lt.-Col. J. A. S. Phillips was in charge of the department from the 7th October 1933 to 31st March 1934.

The whole province is divided into three circles, for the purpose of public health administration, namely, South Bihar, North Bihar and Chota Nagpur and Orissa. Each circle is under the charge of an officer of the rank of the Assistant Director of Public Health. South Bihar Circle was under the charge of Rai Sahib Dr. A. N. Chatterji, from the 1st April to 6th October 1933, while Major S. L. Mitra, I.M.S. remained in charge of the circle, from 7th October to 31st March 1934. Rai Bahadur Dr. J. L. Das held charge of the North Bihar Circle, practically throughout the year, except from 2nd May to 31st May 1933, when the Assistant Director of Public Health, South Bihar Circle, remained in charge of both the circles. Dr. Mazoomdar was in charge of the Chota Nagpur and Orissa circle, for the whole year. He also held charge of the Vaccine Depot, Namkum, throughout the year.

The provincial vaccination inspecting staff consisted of 11 District Inspectors and 36 Sub-Inspectors of vaccination. Out of the 36 Sub-Inspectors of vaccination 3 were employed at the Vaccine Depot, Namkum. The total number of vaccinators employed during the year was 1,182 licensed and 360 paid vaccinators, as compared with 1,165 licensed and 275 paid vaccinators, in the previous year.

Vaccination is performed by paid vaccinators, in the municipal areas, but licensed vaccinators are generally employed to carry out vaccination work, in the rural areas. Paid vaccinators are also employed, by the local bodies, and Civil Surgeons, for short periods, to deal with outbreaks of small-pox.

3. *Operations performed.*—1,916,726 vaccination operations were performed, during the year, as against 1,548,636 done, last year.

This shows an increase of 368,090, in the number of operations, as compared with the figure for 1932-33. 1,877,306 operations were performed by the vaccination staff, as against 1,509,584 done, in the previous year. Of these, 1,063,496 were primary and 813,810 re-vaccinations, as against 1,100,409 primary and 409,175 re-vaccinations, in the preceding year.

Vaccination is not yet a popular measure with the masses in the province. When small-pox is prevalent, the people show some degree of willingness to have their children protected. In 1926 and 1927, when the disease raged, in an epidemic form, a greater number of vaccinations was recorded. In 1929, there were fewer cases of small-pox than in 1928, so that there was not the same incentive. In 1932, there was an increase of 342,008 operations over the figure for 1931. During the year 1933, when an epidemic of small-pox prevailed, in the province, the number of vaccination operations still increased by 368,090 operations over the vaccination figures of the previous year.

There has been a decrease of 36,913, in the number of primary operations and an increase of 404,635, in the number of re-vaccinations done, during the year. Of the total operations performed, 72.43 per cent were successful, as against 84.37 per cent, in the previous year. The decrease in the successful number of vaccination is obviously due to the larger number of re-vaccinations, performed, during the year.

The number of operations performed in municipalities decreased by 13,276 as compared with the last year's returns. The total number of operations performed was 127,704 and the number of successful operations was 55,986 of which 33,860 were primary and 22,126 re-vaccinations as against

42,096 and 6,216 respectively, in the previous year. The ratios of success in municipalities were 91·44 per cent for primary operations and 24·40 per cent for re-vaccinations as compared with 96·68 per cent and 46·96 per cent respectively, last year.

The number of operations performed in rural areas was 1,789,022 as compared with 1,407,656 last year and the ratios of success were 97·97 per cent for primary operations and 41·48 per cent for re-vaccinations.

4. *Vaccination in districts.*—The districts of Patna, Gaya and Shahabad reported decreases of 20,474, 14,246 and 6,700 respectively, in the number of operations performed. Vaccination in the rural areas of these districts is controlled by the health officers of the district boards.

The districts of Muzaffarpur, Champaran and Saran recorded increases of 87,518, 28,647 and 38,688 respectively, whilst Darbhanga recorded a decrease of 4,927. Vaccination in these districts is now controlled by the health officers of district boards.

The districts of Bhagalpur, Monghyr, Purnea, and the Santal Parganas recorded increases of 49,360, 26,432, 61,521 and 4,037 respectively. Vaccination in the rural areas of the districts of Bhagalpur and Purnea is now controlled by the health officers of the district boards.

The districts of Cuttack, Puri, Balasore, Angul and Sambalpur recorded increases of 36,758, 35,362, 5,583, 6,596 and 7,626 respectively. The control of vaccination was taken over by the health officers of the district boards of Cuttack, Puri and Balasore during the year.

The districts of Hazaribagh, Manbhum, Palamau and Singhbhum recorded increases of 17,999, 10,721, 4,508 and 26,309 respectively, whereas Ranchi recorded a decrease of 26,500.

5. *Vaccination in towns and compulsory areas.*—Statement VI shows that during the year 18,314 children under one year of age, out of an available number of 41,789 or 43·90 per cent were successfully vaccinated.

The towns of Hajipore, Bihar, Khagaul, Dumraon, Lalganj, Jamalpore, Dhanbad, Jugsalai and Raghunathpore show the smallest proportion of vaccination work done.

6. *Protection of Infants.*—During the year under report the number of children under one year available for vaccination was 1,142,095 and the number of successful operations was 318,457 equal to 279 per thousand against 281,060 or 243 per thousand successful operations out of 1,158,450 available children during the previous year. The protection of infants in municipalities is separately shown in statement VI. It gives a ratio of 438 per thousand of the surviving infant population as compared with 619 per thousand in the previous year.

These figures remain unsatisfactory inasmuch as they show that more than half of the total number of infants under one year are left unprotected. This is attributed to common prejudice of the public against vaccination at an early age. The advantages of retaining the present age-limit for compulsory primary vaccination are obvious and people should be educated in the benefit of early vaccination.

7. *Incidents and mortality of small-pox.*—During the last ten years the total number of deaths from small-pox in the districts of this province has been 194,119.

During the first five years the number of deaths was 104,338 and during the second 89,781. In each of the last five years the mortality was as follows :

6,648, 8,137, 8,539, 24,297 and 42,160.

The provincial ratios of the mortality from small-pox per thousand population during the last five years have been 0·19, 0·24, 0·23, 0·64 and 1·12.

In the Annual Vaccination Report for 1926-27, it was stated that small-pox, which had been raging in epidemic form, was showing signs of subsiding. There was a considerable decrease in the incidence of the disease in 1927-28; in 1928-29 there was a further reduction and in 1929-30 there was a still further reduction, in the number of cases. In 1930-31, there was a small increase over the figure of 1929-30; in 1931-32 there was a further increase over the figure of 1930-31; in 1932-33 there was still a further increase over the figure of 1931-32 and in 1933-34 there has been a great increase over the figure of the previous year.

8. *Prevention of small-pox.*—The figures, showing the number of operations, performed during the year, still remain discouraging. This is not so much due to insufficiency or inefficiency of the existing arrangement for vaccination in the province, but is chiefly due to the inherent apathy of the public towards this simple and efficient method of protection. Small-pox is a preventable disease and vaccination can prevent it. In the light of this knowledge and in the face of the unsatisfactory vaccination state of the people there is a great necessity for a more vigorous and complete vaccination policy. The question of compulsory vaccination and the best method of carrying it out received careful consideration. Primary vaccination has been made compulsory for many years in all municipal towns but all the provisions in the Act does not appear to be rigidly enforced with the result that a great proportion of children does not get vaccinated until they cross the first year of their lives. Besides, a large number of unvaccinated persons are to be found in every municipal town.

The incidence of small-pox can be definitely prevented provided repeated vaccinations are practised. Vaccination operations are easily done and generally cause no complications. Encephalitis, as a result of vaccination, has never been reported in the province. But prejudices born of ancient traditions die hard and appear to be the chief obstacle in the way of pushing vaccination among the masses. Much of the efforts of the public health staff has, therefore, to be directed towards overcoming these obstacles.

Almost all the district boards, with health organisation schemes, have now assumed the responsibility of the control of vaccination in the rural areas and the vaccination schemes are mostly self-supporting.

The Bengal Vaccination Act was introduced in the districts of Saran and Puri early in April 1934. Arrangements are being made to introduce it in the districts of Shahabad, Cuttack and Balasore.

9. *Inspection of work.*—During the year under report the Assistant Directors of Public Health inspected 32,499 primary vaccinations as against 86,761 in the previous year. Vaccination work was greatly hampered by the earthquake of 15th January, 1934, which caused temporary dislocation of the activities in the affected areas of the province. Certain areas in North Bihar were threatened with an outbreak of small-pox after the earthquake. The Local Government in exercise of the powers conferred by the Epidemic Diseases Act of 1897 had then to prescribe and enforce certain regulations for the promotion of vaccination with a view to control small-pox in these areas, namely, the municipalities and subdivisions of Muzaffarpur, Sitamarhi, Darbhanga, Motihari and Madhubani.

A sharp outbreak of the epidemic of small-pox broke out in the Ranchi town during May and June 1933 and special regulations making vaccination and re-vaccination compulsory in the Ranchi municipal area had to be enforced by Government under the Epidemic Diseases Act. A medical officer of health from the public health cadre was detailed to act as health officer for purposes of administration of these regulations.

The Assistant Directors of Public Health performed vaccination inspection tours of 18 districts as compared with 21 districts in the previous year. Valuable reports were submitted on the work done in each of these districts.

The Superintendents of vaccination of the province inspected 42,805 primary and 13,549 re-vaccinations against 49,280 primary and 5,512 re-vaccinations last year.

10. The vaccine depot at Namkum supplied the province with vaccine throughout the year. A large supply of vaccine is held in reserve and an ample stock of the necessary stores and supplies for manufacture is maintained. 3,537,767 doses of vaccine were manufactured during the year, as compared with 4,819,031 doses last year. 3,582,589 doses were issued, as against 3,088,742 doses in the previous year and 4,761,426 doses were left in stock at the end of the year. The number of cattle used during the year was 1,043 as compared with 1,360 in the previous year. The average yield of crude vaccine was over 38 grammes per animal. The total expenditure of the vaccine depot amounted to Rs. 26,833-4-10 during the year, showing a decrease of Rs. 2,540-8-11 as compared with the expenditure of Rs. 29,373-13-9 of the previous year. The average cost of the vaccine per dose works out at 1.45 pies on the gross expenditure and the sale proceeds of vaccine lymph was Rs. 19,335.

11. *Vaccine Depot and Cold Storage.*—There was no serious outbreak of any epidemic disease among the calves. A few suffered from mild attacks of foot and mouth disease, but the outbreak was promptly checked.

Only nine calves died after admission, the death rate being 0.3 per cent during the year as against 0.5 per cent in the previous year. Besides cholera vaccine, influenza, plague and T. A. B. vaccines were also stocked at the depot. 3,110 doses of influenza vaccine and 72,263 doses of plague vaccines were issued during the year under review from the depot.

12. *Experimental work.*—The following is the summary of the experiments performed by the Superintendent during the year :—

- (i) Seed regeneration was tried by vaccinating calves with the paste prepared from the scabs of a small-pox patient.
- (ii) The lymph which was obtained from the calf vaccinated with the paste of the small-pox scab was passed through four more calves and this attenuated lymph was then used for vaccinating a few children. All these children developed good vesicles without showing any untoward signs and symptoms.
- (iii) The serum which oozed out from the scraping of the vaccinated surface of a calf done with the paste of the scab of a small-pox patient was used for vaccinating a few buffalo calves which all developed good vesicles.

13. *Cost of the Department.*—The total cost of the vaccination department excluding that of the vaccine depot during the year as noted in the statement II was Rs. 1,43,729 as against Rs. 1,55,120 in the previous year.

The cost per each successful operation was one anna and eight pies as compared with one anna and eleven pies last year.

14. *Personnel.*—In conclusion, I desire to bring to the notice of Government the good work done by the Assistant Directors of Public Health in connection with the inspection of vaccination in their respective circles.

Dr. B. P. Mazoomdar was in supervising and controlling charge of the Vaccine Depot, in addition to his own duties, and showed great keenness and interest in all matters connected with the depot.

Dr. C. N. Banerji, the Superintendent of the depot, performed his duties in a satisfactory manner.

S. L. MITRA, MAJOR, I.M.S.,

Offg. Director of Public Health.

APPENDIX I.

1	2	3			4		
No.	Districts.	Population according to the Census of 1931.			Number of Births registered.		
		Male.	Female.	Total.	Male.	Female.	Total.
PATNA DIVISION.							
1	Patna	956,124	890,350	1,846,474	32,207	30,410	62,617
2	Gaya	1,193,643	1,194,819	2,388,462	53,816	52,440	106,256
3	Shahabad	999,099	994,390	1,993,489	42,419	38,857	81,276
	Total	3,148,866	3,079,559	6,228,425	128,442	121,707	250,149
TIRHUT DIVISION.							
4	Saran	1,220,049	1,266,419	2,486,468	46,175	43,612	89,787
5	Champaran	1,080,956	1,064,731	2,145,687	38,654	37,134	75,788
6	Muzaffarpur	1,443,847	1,497,178	2,941,025	55,118	52,342	107,460
7	Darbhanga	1,570,959	1,595,135	3,166,094	55,634	52,600	108,234
	Total	5,315,811	5,423,463	10,739,274	195,581	185,688	381,269
BHAGALPUR DIVISION.							
8	Monghyr	1,145,797	1,141,357	2,287,154	46,055	43,181	89,236
9	Bhagalpur	1,130,584	1,104,048	2,234,632	36,457	34,797	71,254
10	Purnea	1,129,681	1,056,862	2,186,543	35,867	32,484	68,351
11	Santal Parganas	1,025,921	1,025,551	2,051,472	31,960	30,434	62,394
	Total	4,431,983	4,327,818	8,759,801	150,339	140,896	291,235
ORISSA DIVISION.							
12	Cuttack	1,028,134	1,148,573	2,176,707	41,899	39,371	81,270
13	Balasore	480,518	510,082	990,600	17,740	16,659	34,399
14	Angul	108,925	113,811	222,736	5,425	5,212	10,637
15	Puri	500,214	534,940	1,035,154	21,850	20,775	42,625
16	Sambalpur	431,460	449,485	880,945	18,396	17,379	35,775
	Total	2,549,251	2,756,891	5,306,142	105,310	99,396	204,706
CHOTA NAGPUR DIVISION.							
17	Hazaribagh	751,956	765,401	1,517,357	27,918	27,454	55,372
18	Ranchi	777,063	790,086	1,567,149	25,754	25,259	51,013
19	Palamanu	409,778	408,958	818,736	16,593	16,230	32,823
20	Manbhum	940,009	870,881	1,810,890	28,058	26,766	54,824
21	Singhbhum	469,421	460,381	929,802	12,919	12,638	25,557
	Total	3,348,227	3,295,707	6,643,934	111,242	108,347	219,589
	Total for the Province	18,794,138	18,883,438	37,677,576	690,914	6,560,034	1,346,948

IX I.
istricts of Bihar and Orissa Province during the year 1933.

5			6	7	8	9			10
Ratio of births per 1,000 of population.			Number of males born to every 100 fe- males born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of popu- lation.	Mean ratio of births per 1,000 during previous five years.			No.
Male.	Female.	Total.				Male.	Female.	Total.	
17.4	16.5	33.9	105	16.4	...	17.0	16.3	33.3	1
22.5	21.9	44.4	102	20.5	...	21.1	20.4	41.5	2
21.3	19.5	40.8	109	21.2	...	18.7	17.6	36.3	3
20.6	19.5	40.1	105	19.5	...	19.1	18.3	37.4	
18.6	17.5	36.1	106	14.7	...	17.9	17.3	35.2	4
18.0	17.3	35.3	104	13.6	...	16.4	16.0	32.4	5
18.7	17.8	36.5	105	13.3	...	17.0	16.5	33.5	6
17.6	16.6	34.2	106	13.0	...	15.9	15.3	31.2	7
18.2	17.3	35.5	105	13.6	...	16.8	16.2	33.0	
20.1	18.9	39.0	106	17.6	...	18.3	17.8	36.1	8
16.3	15.5	31.8	105	10.0	...	15.4	14.6	30.0	9
16.4	14.8	31.2	110	7.3	...	13.5	12.8	26.3	10
15.6	14.8	30.4	105	14.0	...	13.9	13.6	27.5	11
17.1	16.1	33.2	107	12.3	...	15.3	14.8	30.1	
19.2	18.1	37.3	106	2.2	...	18.6	17.6	36.2	12
17.9	16.8	34.7	106	...	0.5	17.2	16.2	33.4	13
24.3	23.4	47.7	104	19.9	...	21.8	21.1	42.9	14
21.1	20.1	41.2	104	8.5	...	18.5	17.5	36.0	15
20.8	19.8	40.6	106	15.6	...	18.8	17.9	36.7	16
19.8	18.7	38.6	106	5.9	...	18.5	17.5	36.0	
18.4	18.1	36.5	101	19.9	...	18.7	18.3	37.0	17
16.4	16.1	32.5	102	12.5	...	17.0	16.7	33.7	18
20.3	19.8	40.1	102	19.0	...	20.9	20.5	41.4	19
15.5	14.8	30.3	105	15.9	...	14.0	13.3	27.3	20
13.9	13.6	27.5	102	13.9	...	12.8	12.4	25.2	21
16.7	16.3	33.0	103	16.0	...	16.5	16.0	32.5	
18.3	17.4	35.7	105	13.6	...	17.0	16.4	33.4	

Annual Form No. 1A.—Births registered according to class in each town and rural areas in

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
PATNA.									
Patna town	...	...	...	...	...	...	1,563	1,293	2,856
Bihar town	...	...	...	...	...	...	289	284	573
Dinapur Nizamat town	...	...	...	...	...	...	226	208	434
Dinapur Cantonment	...	...	...	...	1	1	138	150	288
Barh town	...	...	...	...	...	...	61	45	106
Khagole town	...	...	...	...	...	...	79	57	136
Total of towns	...	...	...	...	1	1	2,356	2,037	4,393
Total of rural	...	...	...	1	...	1	26,195	25,127	51,322
Total of district	...	...	...	1	1	2	28,551	27,164	55,715
GAYA.									
Gaya town	...	...	...	2	1	3	921	869	1,790
Tikari town	...	...	...	...	...	...	90	79	169
Daudnagar town	...	...	...	...	...	...	210	201	411
Total of towns	...	...	...	2	1	3	1,221	1,149	2,370
Total of rural	...	...	...	2	...	2	47,652	46,488	94,140
Total of district	...	...	...	4	1	5	48,873	47,637	96,510
SHAHABAD.									
Arrah town	...	...	...	...	...	...	218	163	381
Buxar town	...	...	...	...	...	...	154	144	298
Dumraon town	...	...	...	1	2	3	178	162	340
Jagadispur town	...	...	...	...	...	...	92	85	177
Sasaram town	...	...	...	...	...	...	234	179	413
Bhabua town	...	...	...	...	2	2	63	60	123
Total of towns	...	...	...	1	4	5	939	793	1,732
Total of rural	...	...	...	1	...	1	38,941	35,749	74,690
Total of district	...	...	...	2	4	6	39,880	36,542	76,422

DIX.—*contd.**the districts of Bihar and Orissa province during the year 1933—contd.*

4			5			6			7		
Muhammadans.			Buddhists.			Other Classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
11	15	26	...	...	...	...	...	...	1,574	1,308	2,882
104	80	184	...	...	...	...	...	...	393	364	757
61	49	110	...	...	...	...	...	...	287	257	544
33	36	69	...	...	...	...	...	...	171	187	358
24	9	33	...	...	...	...	...	...	85	54	139
12	4	16	...	...	...	...	...	...	91	61	152
245	193	438	...	...	...	...	...	...	2,601	2,231	4,832
3,409	3,052	6,461	...	...	...	1	...	1	29,606	28,179	57,785
3,654	3,245	6,899	...	...	...	1	...	1	32,207	30,410	62,617
242	212	454	...	...	...	19	8	27	1,184	1,090	2,274
18	32	50	...	...	...	...	...	...	108	111	219
46	36	82	...	...	...	...	...	...	256	237	493
306	280	586	...	...	...	19	8	27	1,548	1,438	2,986
4,614	4,514	9,128	...	...	...	...	...	...	52,268	51,002	103,270
4,920	4,794	9,714	...	...	...	19	8	27	53,816	52,440	106,256
80	75	155	...	...	...	...	...	...	298	238	536
44	30	74	...	...	...	...	...	...	198	174	372
26	31	57	...	...	...	...	...	...	205	195	400
38	34	72	...	...	...	...	...	...	130	119	249
93	75	168	...	...	...	...	...	...	325	256	581
40	23	63	...	...	...	...	...	...	105	83	188
321	268	589	...	...	...	...	...	...	1,261	1,065	2,326
2,216	2,043	4,259	...	...	...	...	...	...	41,158	37,792	78,950
2,537	2,311	4,848	...	...	...	...	...	...	42,419	38,857	81,276

Annual Form No. 1A.—Births registered according to class in each town and rural areas

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
SARAN.									
Chapra town	...	...	...	...	...	...	438	271	709
Revelganj town	...	...	...	...	...	...	204	164	368
Siwan town	...	...	...	...	1	1	174	155	329
Total of towns	...	...	...	...	1	1	816	590	1,406
Total of rural	...	...	...	9	8	17	40,289	38,340	78,629
Total of district	...	...	...	9	9	18	41,105	38,930	80,035
CHAMPABAN.									
Bettiah town	...	...	...	37	47	84	200	166	366
Motihari town	...	...	...	...	...	...	146	129	275
Total of towns	...	...	...	37	47	84	346	315	661
Total of rural	...	...	...	17	20	37	32,843	31,475	64,318
Total of district	...	...	...	54	67	121	33,189	31,790	64,979
MUZAFFARPUR.									
Muzaffarpur town	...	...	...	4	2	6	513	414	929
Sitamarhi town	...	...	...	...	...	...	198	160	358
Hajipur town	...	...	...	1	...	1	323	295	618
Lalganj town	...	...	...	...	...	...	157	135	292
Total of towns	...	...	...	5	2	7	1,193	1,004	2,197
Total of rural	...	...	...	1	7	8	46,708	44,519	91,227
Total of district	...	...	...	6	9	15	47,901	45,523	93,424
DARBHANGA.									
Darbhanga town	...	...	...	...	...	...	835	744	1,579
Roserah town	...	...	...	...	...	...	139	117	256
Samaetipur town	...	...	...	1	1	2	110	97	207
Madhubani town	...	...	...	...	...	...	240	224	464
Total of towns	...	...	...	1	1	2	1,324	1,182	2,506
Total of rural	...	...	...	...	..	...	47,384	44,849	92,233
Total of district	...	...	...	1	1	2	48,708	46,031	94,739

DIX I—contd.

in the districts of Bihar and Orissa province during the year 1933—contd.

4			5			6			7		
Mahamr. adans.			Buddhists.			Other Classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
162	99	261	...	...	...	...	...	...	600	370	970
18	31	49	...	...	...	...	...	...	222	195	417
117	112	229	...	...	...	...	...	...	291	268	559
297	242	539	...	...	...	...	...	...	1,113	833	1,946
4,764	4,431	9,195	...	...	...	...	...	...	45,062	42,779	87,841
5,061	4,673	9,734	...	...	...	...	...	...	46,175	43,612	89,787
116	83	199	...	...	...	...	...	...	353	316	669
57	52	109	...	...	...	...	...	...	203	181	384
173	135	308	...	...	...	...	...	...	556	497	1,035
5,238	5,142	10,380	...	...	...	...	...	...	38,098	36,637	74,735
5,411	5,277	10,688	...	...	...	...	...	...	38,654	37,134	75,788
161	165	326	...	...	...	...	...	...	680	581	1,261
46	50	96	...	...	...	...	...	...	244	210	454
65	49	114	...	...	...	...	...	...	389	344	733
25	22	47	...	...	...	...	...	...	182	157	339
297	286	583	...	...	...	...	...	...	1,495	1,292	2,787
6,736	6,309	13,045	...	...	...	178	215	393	53,623	51,050	104,673
7,033	6,595	13,628	...	...	...	178	215	393	55,118	52,342	107,460
336	304	640	...	...	...	...	...	...	1,171	1,048	2,219
6	3	9	...	...	...	...	...	...	145	120	265
30	29	59	...	...	...	...	...	...	141	127	268
126	128	254	...	...	...	...	...	...	366	352	718
498	464	962	...	...	...	...	...	...	1,823	1,647	3,470
6,427	6,104	12,531	...	...	...	...	...	...	52,811	50,953	104,764
6,925	6,568	13,493	...	...	...	...	...	...	55,634	52,600	108,234

Annual Form No. 1A.—Births registered according to class in each town and rural areas

1				2			3		
Registering circle.				Christians.			Hindus.		
—				Male.	Female.	Total.	Male	Female.	Total.
MONGHYR.									
Monghyr town	...	...	...	...	1	1	708	625	1,333
Jamalpur town	...	...	...	2	...	2	468	458	926
Total of towns	...	...	...	2	1	3	1,176	1,083	2,259
Total of rural	...	...	...	4	...	4	40,790	38,403	79,193
Total of district	...	...	...	6	1	7	41,966	39,486	81,452
BHAGALPUR.									
Rhagalpur town	...	...	...	...	...	...	780	653	1,433
Colgong town	...	...	...	...	...	...	69	74	143
Total of towns	...	...	...	...	...	...	849	727	1,576
Total of rural	...	...	...	...	...	...	30,457	29,628	60,085
Total of district	...	...	...	...	...	...	31,306	30,355	61,661
PURNEA.									
Purnea town	...	...	...	1	1	2	99	78	177
Kishenganj town	...	...	...	...	...	...	41	31	72
Katihar town	...	...	...	...	...	...	78	43	121
Forbesganj town	...	...	...	...	...	...	44	58	102
Total of towns	...	...	...	1	1	2	262	210	472
Total of rural	...	...	...	7	4	11	20,376	18,827	39,203
Total of district	...	...	...	8	5	13	20,638	19,037	39,675
SANTAL PARGANAS.									
Sahibganj town	...	...	...	...	1	1	58	34	92
Deoghar town	...	...	...	...	...	...	78	68	146
Dumka town	...	...	...	...	...	...	73	47	120
Madhupur town	...	...	...	...	...	...	27	18	45
Total of towns	...	...	...	...	1	1	236	167	403
Total of rural	...	...	...	78	61	139	16,711	15,536	32,247
Total of district	...	...	...	78	62	140	16,947	15,703	32,650

DIX 1—contd.

in the districts of Bihar and Orissa province during the year 1933—contd.

4			5			6			7		
Muhammadans.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
155	135	290	...	...	...	...	...	...	863	761	1,624
88	81	169	...	...	...	...	...	...	558	639	1,097
243	216	459	...	...	...	...	...	...	1,421	1,300	2,721
3,839	3,478	7,317	...	...	...	1	...	1	44,634	41,881	86,515
4,082	3,694	7,776	...	...	...	1	...	1	46,055	43,181	89,236
159	148	307	...	...	...	...	...	...	939	801	1,740
19	18	37	...	...	...	...	...	...	88	92	180
178	166	344	...	...	...	...	...	...	1,027	893	1,920
4,973	4,276	9,249	...	...	...	...	...	...	35,430	33,904	69,334
5,151	4,442	9,593	...	...	...	...	...	...	36,457	34,797	71,254
33	28	61	...	...	...	...	...	...	133	107	240
32	30	62	...	...	...	...	...	...	73	61	134
21	9	30	...	...	...	...	...	...	99	52	151
42	30	72	...	...	...	...	...	...	86	88	174
128	97	225	...	...	...	...	...	...	391	308	699
14,862	13,139	28,001	...	...	...	231	206	437	35,476	32,176	67,652
14,990	13,236	28,226	...	...	...	231	206	437	35,867	32,484	68,351
20	8	28	...	...	...	...	...	...	78	43	121
3	2	5	...	...	...	1	...	1	82	70	152
8	7	15	...	...	...	...	1	1	81	55	136
10	2	12	...	...	...	...	...	...	37	20	57
41	19	60	...	...	...	1	1	2	278	188	466
3,754	3,527	7,281	...	...	...	11,139	11,122	22,261	31,682	30,246	61,928
3,795	3,546	7,341	...	...	...	11,140	11,123	22,263	31,960	30,434	62,394

Annual Form No. 1A.—Births registered according to class in each town and rural areas

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
CUTTACK.									
Cuttack town	...	...	...	15	19	34	430	364	794
Kendrapara town	...	...	...	...	...	...	170	128	298
Jajpur town	...	...	...	...	...	...	125	107	232
Total of towns	...	...	...	15	19	34	725	599	1,324
Total of rural	...	...	...	...	1	1	40,065	37,728	7,793
Total of district	...	...	...	15	20	35	40,790	38,327	79,117
BALASORE.									
Balasore town	...	...	...	4	6	10	140	148	288
Total of rural	...	...	...	15	14	29	16,782	15,794	32,576
Total of district	...	...	...	19	20	39	16,922	15,942	32,864
ANGUL.									
Total of rural	...	...	...	5	6	11	3,930	3,780	7,710
Total of district	...	...	...	5	6	11	3,930	3,780	7,710
PURI.									
Puri town	...	...	...	1	...	1	396	372	768
Total of rural	...	...	...	17	16	33	20,962	19,915	40,877
Total of district	...	...	...	18	16	34	21,358	20,287	41,645
SAMBALPUR.									
Sambalpur town	...	...	...	...	...	...	261	203	464
Total of rural	...	...	...	21	17	38	17,700	16,758	34,458
Total of district	...	...	...	21	17	38	17,961	16,961	34,922
HAZARIBAGH.									
Hazaribagh town	...	...	...	...	...	...	203	187	390
Chatra town	...	...	...	...	...	...	59	66	135
Giridih town	...	...	...	...	...	...	86	107	193
Total of towns	...	...	...	...	...	...	358	360	718
Total of rural	...	...	...	3	10	13	23,439	23,256	46,695
Total of district	...	...	...	3	10	13	23,797	23,616	47,413

DIX I—contd.

in the districts of Bihar and Orissa province during the year 1933—contd.

4			5			6			7		
Muhammadans.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
65	66	131	...	...	...	...	...	...	510	449	959
31	32	63	...	...	...	...	...	...	201	160	361
15	15	30	...	...	...	...	...	...	140	122	262
111	113	224	...	...	...	...	...	...	851	731	1,582
983	911	1,894	...	...	...	...	...	...	41,048	38,640	79,688
1,094	1,024	2,118	...	...	...	...	...	...	41,899	39,371	81,270
46	36	82	...	...	...	6	5	11	196	195	391
637	535	1,172	...	...	...	110	121	231	17,544	16,464	34,008
683	571	1,254	...	...	...	116	126	242	17,740	16,659	34,399
5	2	7	...	...	...	1,485	1,424	2,909	5,425	5,212	10,637
5	2	7	...	...	...	1,485	1,424	2,909	5,425	5,212	10,637
4	...	4	...	...	...	...	2	2	401	374	775
451	446	897	...	...	...	19	24	43	21,449	20,401	41,850
455	446	901	...	...	...	19	26	45	21,850	20,775	42,625
1	...	1	...	...	...	...	...	...	262	203	465
40	39	79	...	...	...	373	362	735	18,134	17,176	35,310
41	39	80	...	...	...	373	362	735	18,396	17,379	35,775
78	56	134	...	...	...	...	...	...	281	243	524
27	24	51	...	...	...	...	...	...	86	100	186
42	27	69	...	...	...	...	...	...	138	124	262
147	107	254	...	...	...	...	...	...	505	467	972
2,571	2,552	5,323	...	...	...	1,200	1,169	2,369	27,413	26,987	54,400
2,918	2,659	5,577	...	...	...	1,200	1,169	2,369	27,918	27,454	55,372

Annual Form No. 1A.—Births registered according to class in each town and rural areas

1	2			3		
	Christians.			Hindus.		
	Male.	Female.	Total.	Male.	Female.	Total.
Registering circle.						
RANCHI.						
Ranchi town	65	30	104	155	117	272
Lohardaga town	10	6	16	81	84	165
Total of towns	75	45	120	236	201	437
Total of rural	3,791	3,806	7,597	7,888	7,515	15,403
Total of district	3,866	3,851	7,717	8,124	7,716	15,840
PALAMAU.						
Daltonganj town ... ..	...	...	...	88	67	155
Total of rural	135	127	262	14,745	14,490	29,235
Total of district	135	127	262	14,833	14,557	29,390
MANBHUM.						
Purulia town	4	4	8	184	152	336
Raghunathpur town ... ..	...	...	...	105	108	213
Jhalda town ... ..	...	...	...	103	89	192
Dhanbad town	1	1	2	103	95	198
Total of towns	5	5	10	495	444	939
Total of rural	24	24	48	23,202	21,320	44,522
Total of district	29	29	58	23,697	21,764	45,461
SINGHBHUM.						
Chaibassa town	6	4	10	175	142	317
Chakradharpur town	16	6	22	60	48	108
Jugsalai town ... ..	...	2	2	104	72	176
Jamshedpur town	5	4	9	173	137	310
Total of towns	27	16	43	512	399	911
Total of rural	108	103	211	5,237	5,228	10,465
Total of districts	135	119	254	5,749	5,627	11,376
Province.						
Total of towns	176	151	327	13,929	12,050	25,979
Total of rural	4,239	4,224	8,463	562,296	534,725	1,097,021
Total of districts	4,415	4,375	8,790	576,225	546,775	1,123,000

DIX I—contd.

in the districts of Bihar and Orissa province during the year 1933—concl'd.

4			5			6			7		
Muhammadans.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
81	53	134	...	...	...	37	29	66	338	238	576
32	27	59	...	...	...	165	171	336	288	288	576
113	80	193	...	...	...	202	200	402	626	526	1,152
1,042	988	2,030	...	...	...	12,407	12,424	24,831	25,123	24,733	49,861
1,155	1,068	2,223	...	...	...	12,609	12,624	25,233	25,754	25,259	51,013
20	18	38	...	...	...	...	...	...	108	85	193
1,574	1,489	3,063	...	...	...	31	39	70	16,485	16,145	32,630
1,594	1,507	3,101	...	...	...	31	39	70	16,593	16,230	32,823
20	27	47	...	...	...	51	46	97	259	229	488
5	3	8	...	...	...	2	3	5	110	95	205
4	3	7	...	...	...	...	...	...	109	111	220
27	20	47	...	...	...	1	3	4	132	119	251
56	53	109	...	...	...	54	52	106	610	554	1,164
1,542	2,200	3,742	...	...	...	2,680	2,668	5,348	27,448	26,212	53,660
1,598	2,253	3,851	...	...	...	2,734	2,720	5,454	28,058	26,766	54,824
28	18	46	...	...	...	3	4	7	212	168	380
19	14	33	...	...	...	8	7	15	103	75	178
21	12	33	...	...	...	18	18	36	143	104	247
31	28	59	...	...	...	20	19	39	229	188	417
99	72	171	...	...	...	49	48	97	687	535	1,222
90	77	167	...	...	...	6,797	6,695	13,492	12,232	12,103	24,335
189	149	338	...	...	...	6,846	6,743	13,589	12,919	12,638	25,557
3,324	2,845	6,169	...	...	...	331	316	647	17,760	15,362	33,122
69,967	65,254	135,221	...	...	...	36,652	36,469	73,121	673,154	640,672	1,313,826
73,291	68,099	141,390	...	...	...	36,983	36,785	73,768	690,914	656,034	1,346,948

Annual From No. 1B.—Still births registered in the districts of Bihar and Orissa province during the year 1933.

1	2			3		
No.	— — —			Male.	Female.	Total.
1	Patna	...	...	1,550	1,232	2,782
2	Gaya	...	...	1,707	1,281	2,988
3	Shahabad	...	...	25	14	39
4	Saran	...	...	2,196	1,721	3,917
5	Champaran	...	...	1,884	1,423	3,307
6	Muzaffarpur	...	...	3,205	2,484	5,689
7	Darbhanga	...	...	1,355	1,034	2,389
8	Monghyr	...	...	2,069	1,759	3,828
9	Bhagalpur	...	...	539	453	992
10	Purnea	...	...	912	700	1,612
11	Santal Parganas...	...	...	133	119	252
12	Cuttack	...	...	3,333	2,628	5,961
13	Balasore	...	...	1,769	1,494	3,263
14	Angul	...	...	70	50	120
15	Puri	...	...	1,895	1,584	3,479
16	Sambalpur	...	...	97	61	158
17	Hazaribagh	...	...	449	298	747
18	Ranchi	...	...	861	680	1,541
19	Palamau	...	...	241	181	422
20	Manbhum	...	...	305	232	537
21	Singhbhum	...	...	227	189	416
Total for the province				24,822	19,617	44,439

ANNUAL FORM No. II.

Annual Form No. II.—Statement of Births and Deaths registered

1	2	3	4	5	6	7							
No.	District.	Area in square miles.	Average population per square mile.	Population (Census, 1931).			Births.		Number of deaths registered.				
				Male.	Female.	Total.	Total number.	Birth-rate per 1,000 of population.	Male.	Female.	Total.		
PATNA DIVISION.													
1	Patna	2,068	893	956,124	890,350	1,846,474	62,617	33·9	16,575	15,782	32,357		
2	Gaya	4,714	506	1,193,643	1,194,819	2,388,462	106,256	44·4	29,423	27,707	57,130		
3	Shahabad	4,372	456	999,099	994,390	1,993,489	81,276	40·8	20,011	19,035	39,046		
	Total ...	11,154	558	3,148,866	3,079,559	6,228,425	250,149	40·1	66,009	62,524	128,533		
TIRHUT DIVISION.													
4	Saran	2,683	927	1,220,049	1,266,419	2,486,468	89,787	36·1	27,910	25,412	53,322		
5	Champaran	3,531	607	1,080,956	1,064,731	2,145,687	75,788	35·3	24,784	21,751	46,535		
6	Muzaffarpur	3,036	968	1,443,847	1,497,178	2,941,025	107,460	36·5	34,534	33,699	68,233		
7	Darbhanga	3,348	945	1,570,959	1,595,135	3,166,094	108,234	34·2	34,707	32,280	66,987		
	Total ...	12,598	852	5,315,811	5,423,463	10,739,274	381,269	35·5	121,935	113,142	235,077		
BHAGALPUR DIVISION.													
8	Monghyr	3,927	582	1,145,797	1,141,357	2,287,154	89,236	39·0	25,439	23,526	48,965		
9	Bhagalpur	4,226	528	1,130,584	1,104,048	2,234,632	71,254	31·8	26,083	22,552	48,635		
10	Purnea	4,972	439	1,129,681	1,056,862	2,186,543	68,351	31·2	27,740	24,601	52,341		
11	Santal Parganas	5,458	375	1,025,921	1,025,551	2,051,472	62,394	30·4	18,089	15,518	33,607		
	Total ...	18,583	471	4,431,983	4,327,818	8,759,801	291,235	33·2	97,351	86,197	183,548		
ORISSA DIVISION.													
12	Cuttack	3,654	595	1,028,134	1,148,573	2,176,707	81,270	37·3	37,068	39,459	76,527		
13	Balasore	2,055	482	480,518	510,082	990,600	34,399	34·7	16,979	17,890	34,869		
14	Angul	1,681	132	108,925	113,811	222,736	10,637	47·7	3,118	3,066	6,184		
15	Puri	2,492	415	500,214	534,940	1,035,194	42,625	41·2	16,567	17,273	33,840		
16	Sambalpur	3,824	230	431,460	449,485	880,945	35,775	40·6	11,546	10,483	22,029		
	Total ...	13,706	387	2,549,251	2,756,891	5,306,142	204,706	38·6	85,278	88,171	173,449		
CHOTA NAGPUR DIVISION.													
17	Hazaribagh	7,021	216	751,956	765,401	1,517,357	55,372	36·5	13,348	11,879	25,227		
18	Ranchi	7,102	220	777,063	790,086	1,567,149	51,013	32·5	16,599	14,755	31,354		
19	Palamau	4,916	166	409,778	408,958	818,736	32,823	40·1	9,118	8,174	17,292		
20	Manbhum	4,095	442	940,009	870,881	1,810,890	54,824	30·3	14,420	11,804	26,224		
21	Singbhum	3,879	239	469,421	460,381	929,802	25,557	27·5	6,850	5,843	12,693		
	Total ...	27,013	235	3,348,227	3,295,707	6,643,934	219,589	33·0	60,335	52,455	112,790		
	Total for the Province ...	83,054	453	18,794,138	18,883,438	37,677,576	1,346,948	35·7	430,908	402,489	833,397		

X I—contd.

the districts of Bihar and Orissa Province, during the year 1933.

8	9											10			11
100 deaths of females.	Death-rate per 1,000 of population from—											Mean ratio of deaths per 1,000 during previous five years.			No.
	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes.			Male.	Female.	Total.	
									Male.	Female.	Total.				
105	0·1	0·7	...	9·8	0·3	0·5	0·3	5·7	17·3	17·7	17·5	23·0	23·9	23·4	1
106	0·02	2·5	...	16·0	0·06	0·06	0·3	5·0	24·6	23·2	23·9	28·7	26·5	27·6	2
105	0·02	1·3	0·002	13·4	0·02	0·04	0·2	4·6	20·0	19·2	19·6	25·9	24·9	25·4	3
105	0·04	1·6	0·0007	13·3	0·1	0·2	0·3	5·1	21·0	20·3	20·6	26·1	25·2	25·6	
110	0·05	1·5	0·1	12·0	0·1	0·3	0·3	6·8	22·9	20·1	21·4	27·0	22·6	24·7	4
114	0·2	1·2	0·004	16·7	0·006	0·004	0·3	3·2	22·9	20·4	21·7	25·1	21·8	23·4	5
102	0·1	0·9	0·2	18·9	0·03	0·04	0·5	2·6	23·9	22·6	23·2	29·7	26·6	28·2	6
107	0·5	0·6	0·2	17·3	0·05	0·01	0·4	2·2	22·1	20·2	21·2	28·0	24·7	26·3	7
108	0·2	1·0	0·1	16·4	0·06	0·08	0·4	3·6	22·9	20·9	21·9	27·6	24·2	25·9	
108	0·2	1·4	0·05	15·1	0·04	0·03	0·3	4·3	22·1	20·6	21·4	26·5	25·0	25·7	8
115	1·1	1·2	...	17·1	0·03	0·02	0·2	1·9	23·0	20·4	21·8	24·3	22·2	23·2	9
113	0·2	0·9	...	21·3	0·02	0·007	0·2	1·2	24·5	23·3	23·9	22·7	21·5	22·1	10
116	0·2	0·3	...	14·1	0·05	0·1	0·1	1·4	17·6	15·1	16·4	19·0	16·8	17·9	11
113	0·4	1·0	0·01	16·9	0·04	0·04	0·2	2·2	22·0	19·9	20·9	23·2	21·5	22·3	
94	3·8	2·3	...	14·1	4·1	0·5	0·5	9·7	36·0	34·4	35·1	30·9	28·3	29·5	12
95	1·5	0·9	...	19·7	0·5	0·07	0·5	12·1	35·3	35·1	35·2	29·2	29·0	29·1	13
102	0·1	0·01	...	22·6	0·2	0·05	1·0	3·3	28·6	26·9	27·8	26·4	24·5	25·4	14
97	0·9	4·3	...	9·7	3·7	1·2	0·5	12·3	33·1	32·0	32·7	28·7	26·7	27·8	15
110	0·01	0·9	...	10·3	1·5	1·2	0·3	10·7	26·8	23·3	25·0	27·0	24·2	25·6	16
97	2·0	2·1	...	14·0	2·8	0·7	0·5	10·6	33·4	32·0	32·7	29·3	27·3	28·3	
112	0·01	0·3	...	13·3	0·02	0·05	0·2	2·5	17·7	15·5	16·6	22·4	20·1	21·2	17
113	...	0·6	...	15·3	0·3	0·03	0·2	2·8	21·3	18·7	20·0	21·5	18·7	20·7	18
111	0·002	0·4	...	16·9	0·02	0·01	0·3	3·5	22·2	20·0	21·1	29·8	27·3	28·5	19
122	0·02	0·1	...	12·5	0·03	0·06	0·2	1·5	15·3	13·5	14·4	16·5	14·8	15·7	20
113	0·08	0·1	...	11·6	0·02	0·02	0·3	1·4	14·5	12·6	13·6	14·9	12·8	13·8	21
115	0·02	0·3	...	13·9	0·1	0·04	0·2	2·3	18·0	15·9	17·0	20·4	18·2	19·3	
107	0·5	1·1	0·04	15·2	0·4	0·2	0·3	4·3	22·9	21·3	22·1	25·3	23·1	24·2	

Annual Form No. III.—Deaths registered in the districts of Bihar

1	2		3					
No.	District.		Population according to census, 1931.	January.	February.	March.	April.	May.
PATNA DIVISION.								
1	Patna District	Urban ...	258,284	214	196	280	264	280
		Rural ...	1,588,190	1,978	1,527	2,151	2,652	2,938
		Total ...	1,846,474	2,192	1,823	2,431	2,916	3,238
2	Gaya District ...	Urban ...	105,185	510	441	411	417	300
		Rural ...	2,283,277	3,186	2,692	3,696	5,063	5,917
		Total ...	2,388,462	3,696	3,133	4,107	5,480	5,497
3	Shahabad District	Urban ...	117,630	47	34	46	72	73
		Rural ...	1,875,859	2,683	2,409	2,685	2,752	3,767
		Total ...	1,993,489	2,730	2,443	2,731	2,824	3,840
TIRHUT DIVISION.								
4	Saran District...	Urban ...	70,475	78	84	86	160	117
		Rural ...	2,415,993	3,459	3,312	4,279	5,221	5,519
		Total ...	2,486,468	3,537	3,396	4,365	5,381	5,636
5	Champaran District	Urban ...	45,486	24	19	33	63	73
		Rural ...	2,100,201	3,184	2,957	3,039	3,986	4,715
		Total ...	2,145,687	3,208	2,976	3,072	4,049	4,788
6	Muzaffarpur District	Urban ...	82,241	104	82	125	128	145
		Rural ...	2,858,784	4,582	3,755	5,038	6,260	6,295
		Total ...	2,941,025	4,686	3,837	5,163	6,388	6,440
7	Darbhanga District	Urban ...	98,225	103	114	145	209	179
		Rural ...	3,067,869	4,426	4,029	5,071	5,513	5,443
		Total ...	3,166,094	4,529	4,143	5,216	5,722	5,622
BHAGALPUR DIVISION.								
8	Monghyr District	Urban ...	83,209	50	64	85	84	105
		Rural ...	2,203,945	3,374	2,758	3,492	4,806	4,332
		Total ...	2,287,154	3,424	2,822	3,577	4,890	4,437
9	Bhagalpur District	Urban ...	89,080	82	58	75	163	144
		Rural ...	2,145,552	3,587	2,631	3,406	3,816	4,511
		Total ...	2,234,632	3,669	2,689	3,481	3,979	4,655
10	Purnea District	Urban ...	46,223	24	27	37	54	27
		Rural ...	2,140,320	4,376	3,066	4,172	4,371	4,482
		Total ...	2,186,543	4,400	3,093	4,209	4,425	4,509
11	Santal Parganas District...	Urban ...	48,536	13	6	10	10	18
		Rural ...	2,002,936	2,587	2,323	2,483	3,179	2,820
		Total ...	2,051,472	2,600	2,329	2,493	3,189	2,838
ORISSA DIVISION.								
12	Cuttack District	Urban ...	88,556	102	76	116	71	86
		Rural ...	2,088,151	8,106	5,893	5,746	6,053	5,841
		Total ...	2,176,707	8,208	5,969	5,862	6,124	5,927
13	Balasore District	Urban ...	17,843	47	42	25	27	14
		Rural ...	972,757	4,074	2,831	2,457	2,385	2,319
		Total ...	990,600	4,121	2,873	2,482	2,412	2,333

DIX I—contd.

and Orissa Province, during each month of the year 1933— contd.

4							5	
June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
302	327	297	318	308	323	323	3,432	1
3,088	2,875	3,145	3,100	2,083	1,717	1,551	28,925	
3,390	3,202	3,442	3,418	2,391	2,040	1,874	32,357	
330	304	277	275	294	272	233	4,064	2
5,325	4,947	5,592	5,055	4,411	4,040	3,862	53,066	
5,655	5,251	5,869	5,330	4,705	4,312	4,095	57,130	
65	78	54	42	59	61	52	683	3
3,619	3,501	3,417	4,122	3,046	3,287	3,075	38,363	
3,684	3,579	3,471	4,164	3,105	3,348	3,127	39,046	
113	123	116	83	87	73	90	1,210	4
4,693	4,921	5,206	4,125	3,815	3,784	3,778	52,112	
4,806	5,044	5,322	4,208	3,902	3,857	3,868	53,322	
64	39	22	60	26	31	25	479	5
4,462	3,956	4,167	3,512	3,857	4,221	4,000	46,056	
4,526	3,995	4,189	3,572	3,883	4,252	4,025	46,535	
122	137	135	118	119	131	110	1,456	6
5,680	4,938	5,250	5,369	5,581	8,165	5,864	66,777	
5,802	5,075	5,385	5,487	5,700	8,296	5,974	68,233	
167	136	119	159	187	161	146	1,825	7
5,610	4,460	4,912	5,191	6,935	8,148	5,424	65,162	
5,777	4,596	5,031	5,350	7,122	8,309	5,570	66,987	
84	89	115	99	137	102	117	1,131	8
4,036	3,205	4,190	4,006	4,841	4,880	3,914	47,834	
4,120	3,294	4,305	4,105	4,978	4,982	4,031	48,965	
107	114	104	103	101	133	104	1,288	9
3,663	2,713	3,925	4,190	5,240	5,353	4,312	47,347	
3,770	2,827	4,029	4,293	5,341	5,486	4,416	48,635	
39	16	19	29	23	39	51	385	10
3,732	3,321	3,781	3,513	4,603	6,164	6,375	51,956	
3,771	3,337	3,800	3,542	4,626	6,203	6,426	52,341	
14	12	13	19	12	9	11	147	11
2,751	2,286	2,903	2,556	3,089	3,320	3,163	33,460	
2,765	2,298	2,916	2,575	3,101	3,329	3,174	33,607	
76	124	128	130	133	122	133	1,297	12
3,831	4,272	6,033	5,970	8,451	8,065	6,969	75,230	
3,907	4,396	6,161	6,100	8,534	8,187	7,102	76,527	
30	35	26	33	54	41	86	460	13
1,648	2,068	2,666	2,321	4,160	3,730	3,750	34,409	
1,678	2,103	2,692	2,354	4,214	3,771	3,836	34,869	

Annual Form No. III.—Deaths registered in the districts of Bihar

1	2		3					
No.	District.		Population according to census, 1931.	January.	February.	March.	April.	May.
■ ORISSA DIVISION—concl'd.								
14	Angul district ...	{ Rural ...	222,736	463	479	631	768	560
		{ Total ...	222,736	463	479	631	768	560
15	Puri district ...	{ Urban ...	37,568	95	78	98	84	91
		{ Rural ...	997,586	3,361	2,759	2,633	2,740	3,050
		{ Total ...	1,035,154	3,456	2,837	2,731	2,824	3,141
		{ Urban ...	15,017	20	16	19	19	26
16	Sambalpur District ...	{ Rural ...	865,928	1,960	1,874	1,839	1,929	1,918
		{ Total ...	880,945	1,980	1,890	1,858	1,948	1,944
CHOTA NAGPUR DIVISION.								
17	Hazariabagh District ...	{ Urban ...	50,857	21	18	27	29	40
		{ Rural ...	1,466,500	2,084	2,116	1,904	2,155	2,195
		{ Total ...	1,517,357	2,105	2,134	1,931	2,184	2,235
		{ Urban ...	58,094	72	60	41	69	46
18	Ranchi District ...	{ Rural ...	1,509,055	2,404	2,391	2,269	2,480	3,088
		{ Total ...	1,567,149	2,476	2,451	2,310	2,549	3,134
19	Palamau District ...	{ Urban ...	12,040	5	1	8	6	4
		{ Rural ...	806,696	1,722	1,291	1,361	1,623	1,512
		{ Total ...	818,736	1,727	1,292	1,369	1,629	1,516
		{ Urban ...	56,393	48	38	52	46	51
20	Manbhum District ...	{ Rural ...	1,754,497	2,024	1,821	1,966	2,347	2,367
		{ Total ...	1,810,890	2,072	1,859	2,018	2,393	2,418
21	Singhbhum District ...	{ Urban ...	30,697	29	50	56	55	54
		{ Rural ...	899,105	974	919	931	1,142	1,102
		{ Total ...	929,802	1,003	969	987	1,197	1,156
		{ Urban ...	(a)1,411,639	1,688	1,504	1,775	2,030	1,873
	Total for the province ...	{ Rural ...	36,265,937	64,594	53,933	61,249	71,241	73,991
		{ Total ...	3,767,576	66,282	55,437	63,024	73,271	75,864
	Ratio per 1,000 of popula- tion.	{ Urban ...	...	1·1	1·0	1·2	1·4	1·2
		{ Rural ...	...	1·8	1·5	1·7	2·0	2·0
		{ Total ...	...	1·8	1·5	1·7	1·9	2·0

(a) Including cantonment population.

DIX I—*contd.**and Orissa Province, during each month of the year 1933—concl'd.*

4							5	
June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
450	514	546	435	441	435	462	6,184	} 14
450	514	546	435	441	435	462	6,184	
99	124	106	86	104	120	140	1,225	} 15
2,371	2,612	3,047	2,203	2,716	2,519	2,604	32,615	
2,470	2,736	3,153	2,289	2,820	2,639	2,744	33,840	} 16
26	32	35	21	23	27	25	289	
1,797	1,916	1,790	1,450	1,550	1,776	1,941	21,740	} 16
1,823	1,948	1,825	1,471	1,573	1,803	1,966	22,029	
21	36	35	29	13	24	27	320	} 17
1,970	1,947	2,246	1,845	2,166	2,158	2,121	24,907	
1,991	1,983	2,281	1,874	2,179	2,182	2,148	25,327	} 18
33	29	15	27	17	18	15	442	
2,507	2,674	3,272	2,818	2,633	2,330	2,046	30,912	} 18
2,540	2,703	3,287	2,845	2,650	2,348	2,061	31,354	
12	8	12	2	4	8	3	73	} 19
1,342	1,399	1,451	1,346	1,207	1,590	1,375	17,219	
1,354	1,407	1,463	1,348	1,211	1,598	1,378	17,292	} 20
57	58	51	40	64	62	53	620	
2,104	2,232	2,411	1,937	2,157	2,138	2,100	25,604	} 20
2,161	2,290	2,462	1,977	2,221	2,200	2,153	26,224	
39	72	52	59	55	63	62	646	} 21
890	961	1,038	931	1,007	827	1,325	12,047	
929	1,033	1,090	990	1,062	890	1,387	12,693	} 21
1,800	1,893	1,731	1,732	1,820	1,820	1,806	21,472	
65,569	61,718	70,988	65,995	73,989	78,647	70,011	811,925	}
67,369	63,611	72,719	67,727	75,809	80,467	71,817	833,397	
1·2	1·3	1·2	1·2	1·2	1·2	1·2	14·4	}
1·8	1·7	2·0	1·8	2·0	2·2	1·9	22·4	
1·8	1·7	1·9	1·8	2·0	2·1	1·9	22·1	}

Annual Form No. IV.—Deaths registered according to age in the

1	2		Deaths under						
No.	District.		Not exceeding one month.						
			Male.			Female.			Total of columns 3 and 6.
			Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	
			1	2	3	4	5	6	7
PATNA DIVISION.									
1	Patna district	{ Urban ...	82	20	102	68	12	80	182
		{ Rural ...	1,459	915	2,374	1,125	676	1,801	4,175
		{ Total ...	1,541	935	2,476	1,193	688	1,881	4,357
2	Gaya district ...	{ Urban ...	179	78	257	116	71	187	444
		{ Rural ...	3,143	1,200	4,343	2,605	892	3,497	7,840
		{ Total ...	3,322	1,278	4,600	2,721	963	3,684	8,284
3	Shahabad district	{ Urban ...	40	14	54	36	10	46	100
		{ Rural ...	4,052	816	4,868	3,459	483	3,942	8,810
		{ Total ...	4,092	830	4,922	3,495	493	3,988	8,910
TIRHUT DIVISION.									
4	Saran district ...	{ Urban ...	65	25	90	34	17	51	141
		{ Rural ...	1,898	978	2,876	1,499	779	2,278	5,154
		{ Total ...	1,963	1,003	2,966	1,533	796	2,329	5,295
5	Champaran district	{ Urban ...	24	3	27	21	7	28	55
		{ Rural ...	2,701	628	3,329	2,288	434	2,722	6,051
		{ Total ...	2,725	631	3,356	2,309	441	2,750	6,106
6	Muzaffarpur district	{ Urban ...	100	62	162	86	58	144	306
		{ Rural ...	2,275	1,116	3,391	1,937	882	2,819	6,210
		{ Total ...	2,375	1,178	3,553	2,023	940	2,963	6,516
7	Darbhanga district	{ Urban ...	69	52	121	66	34	100	221
		{ Rural ...	2,220	638	2,858	1,733	430	2,163	5,021
		{ Total ...	2,289	690	2,979	1,799	464	2,263	5,242
BHAGALPUR DIVISION.									
8	Monghyr district	{ Urban ...	62	33	95	56	17	73	168
		{ Rural ...	1,668	861	2,529	1,423	653	2,076	4,603
		{ Total ...	1,730	894	2,624	1,479	670	2,149	4,773
9	Bhagalpur district	{ Urban ...	63	33	96	34	20	54	150
		{ Rural ...	1,303	503	1,806	1,118	407	1,525	3,331
		{ Total ...	1,366	536	1,902	1,152	427	1,579	3,481
10	Purnea district...	{ Urban ...	15	10	25	19	4	23	48
		{ Rural ...	1,465	628	2,093	1,137	461	1,598	3,691
		{ Total ...	1,480	638	2,118	1,156	465	1,621	3,739
11	Santal Parganas district	{ Urban ...	7	2	9	11	1	12	21
		{ Rural ...	995	293	1,288	709	204	913	2,201
		{ Total ...	1,002	295	1,297	720	205	925	2,222
ORISSA DIVISION.									
12	Cuttack district	{ Urban ...	45	24	69	37	9	46	115
		{ Rural ...	2,687	1,890	4,577	2,415	1,569	3,984	8,561
		{ Total ...	2,732	1,914	4,646	2,452	1,578	4,030	8,676

N 1—contd.

Districts of Bihar and Orissa Province, during the year 1933—contd.

3									
Year.									
Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total male columns 3, 8 and 11.	Total female columns 6, 9 and 12.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.				
8	9	10	11	12	13	14	15	16	
40	36	76	354	162	516	496	278	774	1
1,543	1,390	2,933	1,087	956	2,043	5,004	4,147	9,151	
1,583	1,426	3,009	1,441	1,118	2,559	5,500	4,425	9,925	
224	203	427	207	195	402	688	585	1,273	2
2,363	2,081	4,444	1,678	1,458	3,166	8,384	7,066	15,450	
2,587	2,234	4,871	1,885	1,683	3,568	9,072	7,651	16,723	
30	17	47	27	25	52	111	88	199	3
1,446	1,157	2,603	1,003	854	1,857	7,317	5,953	13,270	
1,476	1,174	2,650	1,030	879	1,909	7,428	6,041	13,469	
48	45	93	45	36	81	183	132	315	4
1,830	1,390	3,220	1,317	965	2,282	6,023	4,633	10,656	
1,878	1,435	3,313	1,362	1,001	2,363	6,206	4,765	10,971	
16	21	37	11	13	24	54	62	116	5
1,232	1084	2,316	866	687	1,553	5,427	4,493	9,920	
1,248	1105	2,353	877	700	1,577	5,481	4,555	10,036	
47	48	95	40	47	87	249	239	488	6
1,836	1,670	3,506	1,363	1,172	2,535	6,590	5,661	12,251	
1,883	1,718	3,601	1,403	1,219	2,622	6,839	5,900	12,739	
72	72	144	27	38	65	220	219	439	7
1,465	1,327	2,792	837	649	1,486	5,160	4,139	9,299	
1,537	1,399	2,936	864	687	1,551	5,380	4,349	9,729	
42	39	81	32	36	68	169	128	317	8
1,659	1,400	3,059	1,128	1,057	2,185	5,313	4,533	9,849	
1,701	1,439	3,140	1,160	1,093	2,253	5,485	4,681	10,166	
52	47	99	46	37	83	194	138	332	9
1,161	923	2,084	777	718	1,495	3,744	3,166	6,910	
1,213	970	2,183	823	755	1,578	3,938	3,304	7,242	
11	11	22	2	10	19	45	44	89	10
1,743	1,512	3,255	599	586	1,185	4,435	3,696	8,131	
1,754	1,523	3,277	606	596	1,204	4,480	3,740	8,220	
4	5	9	6	4	10	19	21	40	11
740	619	1,359	404	328	732	2,432	1,860	4,292	
744	624	1,368	410	332	742	2,451	1,881	4,332	
37	30	67	15	21	36	121	97	218	12
3,678	3,298	6,976	1,676	1,701	3,377	9,931	8,983	18,914	
3,715	3,328	7,043	1,691	1,722	3,413	10,052	9,080	19,132	

Annual Form No. IV.—Deaths registered according to age in th

1	2		Deaths unde					
No.	District.		Not exceeding one month.					
			Male.			Female.		
			Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.
			1	2	3	4	5	6
								7
ORISSA DIVISION.								
13	Balasore district	{ Urban ... Rural ... Total ...	28 1,525 1,553	3 856 859	31 2,321 2,412	20 1207 1227	7 834 841	27 2,041 2,068
14	Angul district	{ Rural ... Total ...	283 283	228 228	511 511	226 226	205 205	431 431
15	Puri district	{ Urban ... Rural ... Total ...	62 1,392 1,454	34 1,133 1,167	96 2,525 2,621	42 1,201 1,243	27 960 987	69 2,161 2,230
16	Sambalpur district	{ Urban ... Rural ... Total ...	19 1,803 1,822	18 1,071 1,089	37 2,874 2,911	8 1,433 1,441	6 937 943	14 2,370 2,384
CHOTA NAGPUR DIVISION.								
17	Hazaribagh district	{ Urban ... Rural ... Total ...	6 1,112 1,118	4 384 388	10 1,496 1,503	8 794 802	4 317 321	12 1,111 1,123
18	Ranchi district	{ Urban ... Rural ... Total ...	9 1,017 1,026	6 375 581	15 1,592 1,607	...	4 452 456	4 1,170 1,174
19	Palamau district	{ Urban ... Rural ... Total ...	4 1,042 1,046	3 325 328	7 1,367 1,374	2 824 826	1 303 304	3 1,137 1,140
20	Manbhum district	{ Urban ... Rural ... Total ...	24 925 959	14 472 486	48 1,327 1,445	21 749 770	11 294 305	32 1,043 1,075
21	Singbhum district	{ Urban ... Rural ... Total ...	18 390 408	12 105 117	30 495 525	16 319 325	6 90 96	22 409 431
Total for the Province		{ Urban ... Rural ... Total ...	931 35,355 36,286	450 15,615 16,065	1,381 50,970 52,501	761 28,939 29,600	326 12,362 12,588	1,027 41,191 42,218
Total population for the province		...	...	...	...	...	...	...
Ratio per 1,000 of population		...	...	...	...	...	...	...

IX I—contd.

Districts of Bihar and Orissa Province, during the year 1933—contd.

3									
the year.									
Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total male columns 3, 8 and 11.	Total female columns 6, 9 and 12.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.				
8	9	10	11	12	13	14	15	16	
15	14	29	6	6	12	52	47	99	} 13
1,647	1,687	3,334	560	549	4,109	4,588	4,277	8,865	
1,662	1,701	3,362	566	555	1,121	4,640	4,324	8,964	
365	325	690	180	179	359	1,056	935	1,991	} 14
365	325	690	180	179	359	1,056	935	1,991	
55	34	89	22	12	34	173	115	288	} 15
1,634	1,632	3,266	910	909	1,819	5,069	4,702	9,771	
1,689	1,666	3,355	932	921	1,353	5,242	4,817	10,059	
19	5	24	9	8	17	65	27	92	} 16
779	692	1,471	457	442	899	4,110	3,504	7,614	
798	697	1,495	466	450	916	4,175	3,531	7,706	
11	5	16	9	7	16	30	24	54	} 17
771	710	1,481	360	328	688	2,627	2,149	4,776	
782	715	1,497	369	335	704	2,657	2,173	4,830	
13	12	25	13	15	28	41	31	72	} 18
975	908	1,883	546	560	1,046	3,113	2,578	5,691	
988	920	1,908	559	515	1,074	3,154	2,609	5,763	
4	4	8	2	2	4	13	9	22	} 19
562	478	1,040	396	296	692	2,325	1,911	4,236	
566	482	1,048	398	298	696	2,338	1,920	4,258	
17	4	21	14	5	19	79	41	120	} 20
622	458	1,080	254	199	453	3,273	1,700	3,973	
639	462	1,101	268	204	472	2,352	1,741	4,093	
21	8	29	12	12	24	63	42	105	} 21
264	243	512	133	114	247	892	771	1,663	
285	256	541	145	126	271	955	813	1,768	
778	660	1,438	906	691	1,597	3,065	2,378	5,443	
28,315	24,989	53,304	16,531	14,677	31,208	25,810	30,857	176,673	
29,093	25,649	54,742	17,437	15,368	32,805	20,881	33,235	182,116	
...	450,557	337,900	927,550	
...	215,577	177,763	196,630	

Annual Form No. IV.—Deaths registered according to age in the

1	2	3	4	5	6					
No.	District.	1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
		17	18	19	20	21	22	23	24	
PATNA DIVISION.										
1	Patna district	Urban ...	247	198	114	85	52	92	63	132
		Rural ...	3,059	3,058	568	606	296	276	302	344
		Total ...	3,306	3,256	682	691	348	368	365	476
2	Gaya district	Urban ...	400	418	154	151	56	71	77	118
		Rural ...	6,562	6,700	1,507	1,367	707	648	625	641
		Total ...	6,962	7,118	1,661	1,518	763	719	702	760
3	Shahabad district	Urban ...	62	63	15	17	10	17	9	14
		Rural ...	3,393	3,291	885	761	496	416	535	58
		Total ...	3,455	3,354	900	778	506	433	544	59
TIRHUT DIVISION.										
4	Saran district	Urban ...	93	80	29	24	15	15	17	3
		Rural ...	5,851	4,970	1,370	1,287	927	697	827	78
		Total ...	5,944	5,050	1,399	1,311	942	712	844	81
5	Champaran district	Urban ...	84	52	9	14	10	2	7	1
		Rural ...	4,983	4,437	1,375	1,101	804	525	762	53
		Total ...	5,067	4,489	1,384	1,115	814	527	769	59
6	Muzaffarpur district	Urban ...	96	105	41	35	30	20	21	3
		Rural ...	7,641	7,764	2,209	1,984	1,132	924	847	81
		Total ...	7,737	7,869	2,250	2,019	1,162	944	868	85
7	Darbhanga district	Urban ...	153	151	73	68	36	27	41	2
		Rural ...	7,216	7,028	2,581	2,180	1,318	952	1,072	92
		Total ...	7,369	7,179	2,654	2,248	1,354	979	1,113	95
BHAGALPUR DIVISION.										
8	Monghyr district	Urban ...	124	123	25	29	17	24	17	3
		Rural ...	6,748	6,379	1,836	1,175	687	574	549	56
		Total ...	6,872	6,502	1,861	1,204	704	598	566	59
9	Bhagalpur district	Urban ...	150	147	35	31	24	29	21	2
		Rural ...	5,199	4,772	2,104	1,541	1,151	739	966	79
		Total ...	5,349	4,919	2,139	1,572	1,175	768	987	82
10	Purnea district	Urban ...	26	29	11	11	10	6	4	1
		Rural ...	5,290	4,821	2,251	1,690	1,289	904	1,018	1,07
		Total ...	5,316	4,850	2,262	1,701	1,299	910	1,022	1,08
11	Santal Parganas district	Urban ...	8	9	4	3	2	1	4	
		Rural ...	3,541	2,956	1,368	1,208	865	656	934	97
		Total ...	3,549	2,965	1,372	1,211	867	657	938	98
ORISSA DIVISION.										
12	Cuttack district	Urban ...	55	56	18	18	20	11	37	4
		Rural ...	6,463	6,970	2,237	2,030	1,147	944	1,276	1,82
		Total ...	6,518	7,026	2,255	2,048	1,167	955	1,313	1,86
13	Balasore district	Urban ...	17	14	10	9	6	3	12	2
		Rural ...	2,078	2,223	657	641	379	847	528	72
		Total ...	2,095	2,237	667	650	385	850	540	74

IX I—contd.

istricts of Bihar and Orissa Province, during the year 1933—contd.

7		8		9		10		11		12
20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.		No.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
25	26	27	28	29	30	31	32	33	34	
136	255	118	116	120	71	138	91	313	317	1
789	1,078	777	817	828	730	1,051	905	2,104	2,186	
925	1,333	895	933	948	801	1,189	996	2,417	2,503	
134	181	134	107	130	79	131	66	180	204	2
1,733	2,038	1,615	1,593	1,616	1,310	1,728	1,377	2,862	2,983	
1,867	2,219	1,749	1,700	1,746	1,389	1,859	1,443	3,042	3,187	
24	40	18	31	23	12	20	15	44	51	3
1,475	1,803	1,459	1,422	1,151	938	981	975	1,983	2,543	
1,499	1,843	1,477	1,453	1,174	950	1,001	990	2,027	2,594	
56	65	65	47	46	43	50	51	71	91	4
2,188	2,412	2,348	2,232	1,951	1,570	1,789	1,713	4,011	4,533	
2,244	2,477	2,413	2,279	1,997	1,613	1,839	1,764	4,082	4,624	
17	29	15	13	11	9	14	18	18	29	5
2,330	2,209	2,364	1,981	2,109	1,810	1,860	1,727	2,531	2,641	
2,347	2,238	2,379	1,994	2,120	1,819	1,874	1,745	2,549	2,670	
66	58	67	43	69	34	49	42	77	77	6
2,721	2,682	2,952	2,749	2,716	2,347	2,872	2,864	4,089	5,214	
2,787	2,740	3,019	2,792	2,785	2,381	2,921	2,906	4,166	5,291	
87	96	87	70	91	43	90	66	94	93	7
3,158	3,216	3,374	2,934	3,018	2,438	2,950	3,140	3,888	4,475	
3,245	3,312	3,461	3,004	3,109	2,481	3,040	3,206	3,982	4,568	
35	59	27	36	29	23	30	31	74	78	8
1,610	1,648	1,687	1,459	1,844	1,368	1,913	1,752	3,202	3,491	
1,645	1,707	1,714	1,495	1,873	1,391	1,943	1,783	3,276	3,569	
62	62	45	44	47	28	47	35	70	55	9
2,246	2,057	2,428	2,064	2,358	1,781	2,069	1,866	3,123	3,185	
2,308	2,119	2,473	2,108	2,405	1,809	2,116	1,891	3,193	3,240	
18	27	21	21	17	10	10	9	27	25	10
2,930	3,694	3,016	2,728	2,654	1,848	2,128	1,719	2,510	2,235	
2,978	3,721	3,037	2,749	2,671	1,858	2,138	1,728	2,537	2,260	
7	7	6	5	10	5	8	4	13	6	11
1,864	2,001	1,935	1,522	1,668	1,157	1,428	1,287	1,923	1,830	
1,871	2,008	1,941	1,527	1,678	1,162	1,436	1,291	1,936	1,836	
99	91	116	64	74	48	96	52	89	89	12
3,106	4,724	3,016	3,406	2,714	2,520	3,007	3,086	3,441	4,402	
3,205	4,815	3,132	3,470	2,788	2,568	3,103	3,138	3,530	4,491	
25	38	32	23	37	21	25	23	28	16	13
1,594	2,369	1,871	1,930	1,723	1,698	1,719	1,614	1,528	1,849	
1,619	2,407	1,903	1,953	1,760	1,719	1,744	1,637	1,626	1,865	

Annual Form No. IV.—Deaths registered according to age in the

1	2	3	4	5	6					
No.	District.	1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
		17	18	19	20	21	22	23	24	
ORISSA DIVISION—concl'd.										
14	Angul district ...	{ Rural ...	584	646	157	157	70	49	81	81
		{ Total ...	584	646	157	157	70	49	81	81
15	Puri district ...	{ Urban ...	59	55	19	18	12	5	17	17
		{ Rural ...	2,931	3,177	857	849	370	332	393	644
16	Sambalpur district ...	{ Total ...	2,990	3,232	876	867	382	337	410	661
		{ Urban ..	15	12	6	4	2	4	4	4
		{ Rural ...	1,791	1,572	624	541	344	299	289	351
		{ Total ...	1,806	1,584	630	545	346	303	293	361
CHOTA NAGPUR DIVISION.										
17	Hazaribagh district ...	{ Urban ...	27	32	11	8	11	10	11	11
		{ Rural ...	3,049	2,680	932	822	571	432	480	471
18	Ranchi district ...	{ Total ...	3,076	2,712	943	830	582	442	491	482
		{ Urban ...	82	84	15	18	10	10	6	1
19	Palamanu district ...	{ Rural ...	3,802	3,260	1,024	894	661	595	638	644
		{ Total ...	3,884	3,344	1,039	912	671	605	644	651
20	Manbhum district ...	{ Urban ...	7	5	1	2	...	4	2	2
		{ Rural ...	2,102	1,866	598	465	318	216	291	331
21	Singhbhum district ...	{ Total ...	2,109	1,871	599	467	318	229	293	341
		{ Urban ...	39	33	11	17	13	7	12	1
		{ Rural ...	2,094	1,869	883	672	687	485	911	761
		{ Total ...	2,133	1,902	894	689	700	492	923	781
		{ Urban ...	49	47	17	16	13	8	11	3
		{ Rural ...	1,233	1,110	470	412	265	199	329	261
		{ Total ...	1,282	1,157	487	428	278	207	340	301
		{ Urban ...	1,793	1,713	618	578	349	366	393	621
	Total for the Province ...	{ Rural ...	85,615	81,549	25,993	22,383	14,484	11,209	13,703	14,221
		{ Total ...	87,408	83,262	26,611	22,961	14,833	11,575	14,096	14,841
Total population for the province ...			2,274,148	2,400,907	2,642,921	2,430,279	2,302,350	2,043,919	1,563,970	1,620,921
Ratio per 1,000 of population ...			38.4	34.7	10.0	9.4	6.4	5.6	9.0	9.1

[X I—contd.]

Districts of Bihar and Orissa Province, during the year 1933—concl'd.

7		8		9		10		11		12
20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.		No.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
25	26	27	28	29	30	31	32	33	34	
189	234	234	232	232	171	210	230	305	327	14
189	234	234	232	232	171	210	230	305	327	
57	41	72	58	90	33	78	64	112	128	15
1,095	1,756	957	1,168	1,169	929	1,389	1,266	1,648	1,915	
1,152	1,797	1,029	1,226	1,259	962	1,467	1,330	1,760	2,043	16
17	11	21	7	13	11	10	11	20	24	
676	853	769	659	720	564	855	736	1,195	1,280	17
693	864	790	666	733	575	865	747	1,215	1,304	
13	23	11	18	9	9	14	8	22	22	18
1,100	1,193	1,087	991	1,049	738	1,100	1,044	1,194	1,190	
1,113	1,216	1,098	1,009	1,058	747	1,114	1,052	1,216	1,212	19
14	23	13	7	13	11	6	8	23	11	
1,329	1,450	1,200	999	1,246	937	1,668	1,484	1,695	1,696	20
1,343	1,473	1,213	1,006	1,259	948	1,674	1,492	1,718	1,707	
...	2	1	2	1	4	2	2	10	3	21
778	829	777	730	672	626	667	621	553	536	
778	831	778	732	673	630	669	623	563	539	22
35	37	58	31	39	16	31	20	39	45	
1,494	1,450	1,544	1,136	1,237	851	1,426	1,094	1,515	1,517	23
1,529	1,487	1,602	1,167	1,276	867	1,457	1,114	1,554	1,562	
52	46	77	25	52	14	24	15	25	16	24
670	551	635	479	642	447	585	499	746	845	
722	597	712	504	694	461	609	514	771	861	25
954	1,191	1,004	768	921	524	873	631	1,349	1,380	
35,105	40,247	36,045	33,231	33,317	26,778	33,395	30,989	46,116	50,873	26
36,059	41,438	37,049	33,999	34,238	27,302	34,264	31,620	47,465	52,253	
3,218,213	3,422,319	2,714,059	2,737,421	1,865,043	1,811,586	1,069,752	1,099,899	684,125	848,187	
11·2	12·0	13·6	12·4	18·3	15·1	32·0	28·8	69·4	61·6	

Annual form No. IVA.—Deaths under one year registered according to class in each town and

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
PATNA.									
Patna town	...	...	...	...	...	...	326	141	467
Bihar town	...	...	...	...	...	...	48	34	82
Dinapur Nizammat...	...	...	...	...	...	...	39	32	71
Dinapur Cantonment	...	...	...	...	...	...	37	34	71
Barh town	...	...	...	...	...	...	16	5	21
Khagole town	...	...	...	...	...	...	10	10	20
Total of towns	...	...	...	...	...	...	476	256	732
Total of rural	...	...	...	...	...	...	4,576	3,825	8,401
Total of district	...	...	...	...	...	...	5,052	4,081	9,133
GAYA.									
Gaya town	...	...	...	...	...	...	456	414	870
Tikari town	...	...	...	...	...	...	10	12	22
Daudnagar town	...	...	...	...	...	...	47	28	75
Total of towns	...	...	...	...	...	...	513	454	967
Total of rural	...	...	...	2	...	2	7,638	6,405	14,043
Total of district	...	...	...	2	...	2	8,151	6,859	15,010
SHAHABAD.									
Arrah town	...	...	...	...	...	...	13	12	25
Buxar town	...	...	...	...	...	...	11	8	19
Dumraon town	...	...	...	...	...	...	10	7	17
Jagadispur town	...	...	...	...	...	...	8	9	17
Sasaram town	...	...	...	...	...	...	26	17	43
Bhabua town	...	...	...	...	...	...	8	6	14
Total of towns	...	...	...	...	...	...	76	59	135
Total of rural	...	...	...	...	...	...	6,883	5,574	12,457
Total of district	...	...	...	...	...	...	6,959	5,633	12,592

DIX.

rural areas in the districts of Bihar and Orissa Province during the year 1933—contd.

4			5			6			7		
Muhammdaans.			Buddhist.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
...	...	...	...	...	...	...	...	...	326	141	467
9	5	14	...	...	...	...	...	...	57	39	96
9	12	21	...	...	...	...	...	...	48	44	92
1	5	6	...	...	...	...	...	...	38	39	77
1	...	1	...	...	...	...	...	...	17	5	22
...	...	...	...	...	...	...	...	...	10	10	20
20	22	42	...	...	...	...	...	...	496	278	774
428	322	750	...	...	...	...	...	...	5,004	4,147	9,151
448	344	792	...	...	...	...	...	...	5,500	4,425	9,925
151	113	264	...	...	...	18	15	33	625	542	1,167
1	2	3	...	...	...	...	...	...	11	14	25
5	1	6	...	...	...	...	...	...	52	29	81
157	116	273	...	...	...	18	15	33	688	585	1,273
744	661	1,405	...	...	...	...	...	...	8,384	7,066	15,450
901	777	1,678	...	...	...	18	15	33	9,072	7,651	16,723
8	7	15	...	...	...	...	...	...	21	19	40
7	6	13	...	...	...	...	...	...	18	14	32
4	...	4	...	...	...	...	...	...	14	7	21
4	6	10	...	...	...	...	...	...	12	15	27
8	8	16	...	...	...	...	...	...	34	25	59
4	2	6	...	...	...	...	...	...	12	8	20
35	29	64	...	...	...	...	...	...	111	88	199
434	379	813	...	...	...	...	...	...	7,317	5,953	13,270
469	408	877	...	...	...	...	...	...	7,428	6,041	13,469

Annual form No. IVA.—Deaths under one year registered according to class in each town and

1				2			3		
Registering circle.				Christians.			Hindus.		
—				Male.	Female.	Total.	Male.	Female.	Total.
SARAN.									
Chapra town	...	...	...	...	...	...	83	56	139
Revelganj town	...	...	...	...	...	...	36	29	65
Siwan town	...	...	...	...	...	...	16	18	34
Total of towns	...	...	...	...	...	...	135	103	238
Total of rural	...	...	...	...	...	...	5,369	4,097	9,466
Total of district	...	...	...	...	...	...	5,504	4,200	9,704
CHAMPARAN.									
Bettiah town	...	...	...	6	5	11	9	8	17
Motihari town	...	...	...	...	...	...	24	28	52
Total of towns	...	...	...	6	5	11	33	36	69
Total of rural	...	...	...	2	...	2	4,588	3,730	8,318
Total of district	...	...	...	8	5	13	4,621	3,766	8,387
MUZAFFARPUR.									
Muzaffarpur town	...	...	...	...	...	...	71	55	126
Sitamarhi town	...	...	...	...	...	...	36	33	69
Hajipur town	...	...	...	...	...	...	66	71	137
Lalganj town	...	...	...	...	...	...	31	22	53
Total of towns	...	...	...	...	...	...	204	181	385
Total of rural	...	...	...	1	1	2	5,513	4,765	10,278
Total of district	...	...	...	1	1	2	5,717	4,946	10,663
DARBHANGA.									
Darbhanga town	...	...	...	...	...	...	121	116	237
Roserah town	...	...	...	...	...	...	8	15	23
Samastipur town	...	...	...	...	...	...	15	17	32
Madhubani town	...	...	...	...	...	...	21	15	36
Total of towns	...	...	...	...	...	...	165	163	328
Total of rural	...	...	...	...	...	...	4,575	3,651	8,226
Total of district	...	...	...	...	...	...	4,740	3,814	8,554

DIX.

rural areas in the districts of Bihar and Orissa Province during the year 1933—contd.

4			5			6			7		
Muhammadans.			Buddhist.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
27	20	47	...	...	...	...	...	...	110	76	186
9	4	13	...	...	...	...	...	...	45	33	78
12	5	17	...	...	...	...	...	...	28	23	51
48	29	77	...	...	...	...	...	...	183	132	315
649	532	1,181	...	...	...	5	4	9	6,023	4,633	10,656
697	561	1,258	...	...	...	5	4	9	6,206	4,765	10,971
8	6	14	...	...	...	...	...	...	23	19	42
7	15	22	...	...	...	...	...	...	31	43	74
15	21	36	...	...	...	...	...	...	54	62	116
837	763	1,600	...	...	...	...	...	...	5,427	4,493	9,920
852	784	1,636	...	...	...	...	...	...	5,481	4,555	10,036
21	27	48	...	...	...	...	...	...	92	81	173
6	9	15	...	...	...	...	...	...	42	43	85
16	19	35	...	...	...	...	...	...	82	90	172
2	3	5	...	...	...	...	...	...	33	25	58
45	58	103	...	...	...	...	...	...	249	239	488
1,021	854	1,875	...	...	...	55	41	96	6,590	5,661	12,251
1,066	912	1,978	...	...	...	55	41	96	6,839	5,900	12,739
47	41	88	...	...	...	...	...	...	168	157	325
...	1	1	...	...	...	...	...	...	8	16	24
4	1	5	...	...	...	...	...	...	19	18	37
4	4	8	...	...	...	...	...	...	25	19	44
55	47	102	...	...	...	...	...	...	220	210	430
585	488	1,073	...	...	...	...	...	...	5,160	4,139	9,299
640	535	1,175	...	...	...	...	...	...	5,330	4,349	9,729

Annual form No. IVA.—Deaths under one year registered according to class in each town and

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
MONGHYR									
Monghyr town	...	...	...	...	...	...	78	66	144
Jamalpur town	...	...	...	...	...	...	53	41	97
Total of towns	...	..	...	...	...	...	134	107	241
Total of rural	...	...	...	...	...	...	4,661	3,980	8,641
Total of district	...	...	...	...	...	...	4,795	4,087	8,882
BHAGALPUR.									
Bhagalpur town	...	...	...	...	...	...	153	103	256
Colgong town	...	...	...	...	...	...	11	8	19
Total of towns	...	...	...	...	...	...	164	111	275
Total of rural	...	...	...	...	...	...	3,178	2,734	5,912
Total of district	...	...	...	...	...	..	3,342	2,845	6,187
PURNEA.									
Purnea town	...	...	...	...	...	...	11	14	25
Kishenganj town	...	...	...	...	...	...	3	2	5
Katihar town	...	...	...	...	...	...	10	7	17
Forbesganj town	...	...	...	...	...	...	4	4	8
Total of towns	...	...	...	...	...	...	28	27	55
Total of rural	...	...	...	1	...	1	2,648	2,202	4,850
Total of district	...	...	...	1	...	1	2,676	2,229	4,905
SANTAL PARGANAS.									
Sahibganj town	...	...	...	...	...	...	5	7	12
Deoghar town	...	...	...	...	...	...	8	6	14
Dumka town	...	...	...	...	...	...	5	5	10
Madhupur town	...	...	...	...	...	...	...	1	1
Total of towns	...	...	...	...	...	...	18	19	37
Total of rural	...	...	...	8	6	14	1,451	1,099	2,550
Total of district	...	...	...	8	6	14	1,469	1,118	2,587

DIX.

rural areas in the districts of Bihar and Orissa Province during the year 1933—contd.

4			5			6			7		
Muhammadas.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
22	30	52	...	...	...	...	...	...	100	96	196
13	11	24	...	...	...	...	...	...	69	52	121
35	41	76	...	..	...	...	...	...	169	148	317
655	553	1,208	...	...	...	...	...	...	5,316	4,533	9,849
690	594	1,284	...	...	...	...	...	...	5,485	4,681	10,166
29	23	52	...	...	...	...	...	...	182	126	308
1	4	5	...	...	...	...	...	...	12	12	24
30	27	57	...	...	...	...	...	...	194	138	332
566	432	998	...	...	...	...	...	...	3,744	3,166	6,910
596	459	1,055	...	...	...	...	...	...	3,938	3,304	7,242
5	8	13	...	...	...	...	...	...	16	22	38
2	1	3	...	...	...	...	...	...	5	3	8
...	2	2	...	...	...	...	...	...	10	9	19
10	6	16	...	...	...	...	...	...	14	10	24
17	17	34	...	...	...	...	...	...	45	44	89
1,772	1,478	3,250	...	...	...	14	16	30	4,435	3,696	8,131
1,789	1,495	3,284	...	...	...	14	16	30	4,480	3,740	8,220
...	1	1	...	...	...	...	...	...	5	8	13
...	...	...	...	...	...	...	...	...	8	6	14
...	...	...	...	...	...	...	1	1	5	6	11
1	...	1	...	...	...	...	...	...	1	1	2
1	1	2	...	...	...	...	1	1	19	21	40
340	261	601	...	...	...	633	494	1,127	2,432	1,860	4,292
341	262	603	...	...	...	633	495	1,128	2,451	1,881	4,332

Annual form No. IVA.—Deaths under one year registered according to class in each town and

1				2			3		
Registering circle.				Christians.			Hindus.		
				Male.	Female.	Total.	Male.	Female.	Total.
CUTTACK.									
Cuttack town	...	...	...	1	...	1	36	31	67
Kendrapara town	...	...	...	...	...	...	48	33	81
Jajpur town	...	...	...	...	...	...	22	13	35
Total of towns	...	...	...	1	...	1	106	77	183
Total of rural	...	...	...	1	2	3	9,689	8,748	18,437
Total of district	...	...	...	2	2	4	9,795	8,825	18,620
BALASORE.									
Balasore town	...	...	...	...	...	...	40	39	79
Total of rural	...	...	...	...	...	...	4,407	4,095	8,502
Total of district	...	...	...	...	...	...	4,447	4,134	8,581
ANGUL.									
Total of rural	...	...	...	1	...	1	728	638	1,366
Total of district	...	...	...	1	...	1	728	638	1,366
PURI.									
Puri town	...	...	...	...	...	...	171	115	286
Total of rural	...	...	...	1	3	4	4,971	4,590	9,561
Total of district	...	...	...	1	3	4	5,142	4,705	9,847
SAMBALPUR.									
Sambalpur town...	...	...	...	...	...	...	64	27	91
Total of rural	...	...	...	7	8	15	4,027	3,435	7,462
Total of district	...	...	...	7	8	15	4,091	3,462	7,553
HAZARIBAGH.									
Hazaribagh town	...	...	...	...	...	...	20	17	37
Chatra	...	...	...	...	...	...	1	3	4
Giridih	...	...	...	...	...	...	3	2	5
Total of towns	...	...	...	...	...	...	24	22	46
Total of rural	...	...	...	...	...	...	2,286	1,786	4,072
Total of district	...	...	...	...	...	...	2,310	1,808	4,118

DIX.

rural areas in the districts of Bihar and Orissa Province during the year 1933—contd.

4			5			6			7		
Muhammadans.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
6	11	17	...	...	...	...	...	...	43	42	85
6	7	13	...	...	...	...	...	...	54	40	94
2	2	4	...	...	...	...	...	...	24	15	39
14	20	34	...	...	...	...	...	...	121	97	218
241	233	474	...	...	...	...	...	...	9,931	8,983	18,914
255	253	508	...	...	...	...	...	...	10,052	9,080	19,132
12	8	20	...	...	...	...	...	...	52	47	99
170	170	340	...	...	...	11	12	23	4,588	4,277	8,865
182	178	360	...	...	...	11	12	23	4,640	4,324	8,964
1	...	1	...	...	...	326	297	623	1,056	935	1,991
1	...	1	...	...	...	326	297	623	1,056	935	1,991
2	...	2	...	...	...	...	...	...	173	115	288
95	107	202	...	...	...	2	2	4	5,069	4,702	9,771
97	107	204	...	...	...	2	2	4	5,242	4,817	10,059
1	...	1	...	...	...	...	...	...	65	27	92
6	4	10	...	...	...	70	57	127	4,110	3,504	7,614
7	4	11	...	...	...	70	57	127	4,175	3,531	7,706
2	1	3	...	...	...	...	...	...	22	18	40
2	1	3	...	...	...	...	...	...	3	4	7
2	...	2	...	...	...	...	...	...	5	2	7
6	2	8	...	...	...	...	...	...	30	24	54
270	281	551	...	...	...	71	82	153	2,627	2,149	4,776
276	283	559	...	...	...	71	82	153	2,657	2,173	4,830

Annual form No. IVA.—Deaths under one year registered according to class in each town and

1				2			3		
Registering circle.				Christians.			Hindus.		
—				Male.	Female.	Total.	Male.	Female.	Total.
RANCHI.									
Ranchi town	...	...	...	2	2	4	9	11	20
Lohardaga „	...	...	...	1	1	2	10	4	14
Total of towns	...	...	...	3	3	6	19	15	34
Total of rural	...	...	...	528	356	884	990	834	1,824
Total of district	...	...	...	531	359	890	1,009	849	1,858
PALAMAU.									
Daltonganj town...	...	...	...	...	...	...	12	8	20
Total of rural	...	...	...	21	14	35	2,076	1,722	3,798
Total of district	...	...	...	21	14	35	2,088	1,730	3,818
MANBHUM.									
Purulia town	...	...	...	...	...	...	23	8	31
Raghunathpur town	...	...	...	...	...	...	5	11	16
Jhalda town	...	...	...	...	...	...	20	10	30
Dhanbad town	...	...	...	...	...	...	17	9	26
Total of towns	...	...	...	...	...	...	65	38	103
Total of rural	...	...	...	2	...	2	1,905	1,408	3,313
Total of district	...	...	...	2	...	2	1,970	1,446	3,416
SINGHBHUM.									
Chaibassa town	...	...	...	...	...	...	16	12	28
Chakradharpur town	...	...	...	...	...	...	19	11	30
Jugsalai town	...	...	...	...	...	...	9	6	15
Jamshedpur town	...	...	...	2	...	2	8	11	19
Total of towns	...	...	...	2	...	2	52	40	92
Total of rural	...	...	...	13	15	28	524	457	981
Total of district province	...	...	...	15	15	30	576	497	1,073
Total of towns	...	...	...	12	8	20	2,409	1,897	4,396
Total of rural	...	...	...	588	405	993	82,683	69,775	152,458
Total of districts	...	...	...	600	413	1,013	85,182	71,672	156,854

DIX.

rural areas in the districts of Bihar and Orissa Province during the year 1933—concl'd.

4			5			6			7		
Muhammadans.			Buddhists.			Other classes.			Total.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
11	7	18	...	...	...	6	5	11	28	25	53
1	...	1	...	...	...	1	1	2	13	6	19
12	7	19	...	...	...	7	6	13	41	31	72
250	198	448	...	...	...	1,345	1,190	2,535	3,113	2,578	5,691
262	205	467	...	...	...	1,352	1,196	2,548	3,154	2,609	5,763
1	1	2	...	...	...	...	...	...	13	9	22
215	167	382	...	...	...	13	8	21	2,325	1,911	4,236
216	168	384	...	...	...	13	8	21	2,338	1,920	4,258
3	...	3	...	...	...	5	...	5	31	8	39
1	1	2	...	...	...	...	...	...	6	12	18
...	...	...	...	...	...	...	...	...	20	10	30
5	2	7	...	...	...	...	...	...	22	11	33
9	3	12	...	...	...	5	...	5	79	41	120
130	113	243	...	...	...	236	179	415	2,273	1,700	3,973
139	116	255	...	...	...	241	179	420	2,352	1,741	4,093
6	1	7	...	...	...	1	...	1	23	13	36
...	...	...	...	...	...	...	...	...	19	11	30
...	...	...	...	...	...	...	...	...	9	6	15
1	1	2	...	...	...	1	...	1	12	12	24
7	2	9	...	...	...	2	...	2	63	42	105
11	12	23	...	...	...	341	287	631	892	771	1,663
18	14	32	...	...	...	346	287	633	955	813	1,768
522	451	973	...	...	...	32	22	54	3,065	2,378	5,443
9,420	8,008	17,428	...	...	...	3,125	2,669	5,794	95,816	80,857	176,673
9,912	8,459	18,401	...	...	...	3,157	2,691	5,848	98,881	83,235	182,116

Annual Form No. V.—Deaths registered according to class in t

1	2	3											
No.	District.	Population according											
		Christians.			Hindus.			Muhammadans.			Buddhists.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
	PATNA DIVISION.												
1	Patna	1,990	1,513	3,503	852,632	787,147	1,639,829	101,175	101,489	202,655	15	1	1
2	Gaya	298	278	576	1,075,495	1,058,046	2,133,541	117,436	136,124	253,560	13	6	1
3	Shahabad	1,083	1,252	2,335	924,282	914,580	1,838,862	73,260	78,108	151,368	5	6	1
	TIRHUT DIVISION.												
4	Saran	282	178	460	1,072,048	1,104,936	2,176,984	147,703	161,302	309,005	...	...	...
5	Champanan	1,681	1,974	3,655	903,010	884,264	1,787,274	175,988	178,247	354,235	...	...	...
6	Muzaffarpur	481	406	887	1,258,489	1,290,517	2,549,006	184,852	206,239	391,091	1	...	...
7	Darbhanga	283	245	531	1,354,928	1,370,499	2,725,427	215,663	224,374	440,037	...	...	...
	BHAGALPUR DIVISION.												
8	Monghyr	1,058	859	1,917	1,031,465	1,017,727	2,049,192	109,408	119,089	228,497	3	1	...
9	Bhagalpur	881	679	1,560	1,002,664	977,598	1,980,262	125,257	124,179	249,436	...	...	...
10	Purnea	973	850	1,823	665,451	619,863	1,285,314	456,347	430,021	886,368	...	...	...
11	Santal Parganas	6,464	6,882	13,346	475,601	473,597	949,198	112,839	110,863	223,702	...	...	...
	ORISSA DIVISION.												
12	Cuttack	1,222	1,651	2,873	996,424	1,110,406	2,106,830	29,965	36,139	66,104	209	183	39
13	Balasore	685	690	1,375	457,943	486,738	944,681	15,661	16,074	31,735	1	...	...
14	Angul	156	151	307	80,344	83,319	163,663	176	117	293	...	...	...
15	Puri	768	768	1,536	488,555	522,524	1,011,079	10,875	11,643	22,518	2	1	...
16	Sambalpur	1,780	1,838	3,618	426,029	444,149	870,178	2,008	1,805	3,813	...	...	...
	CHOTA NAGPUR DIVISION.												
17	Hazaribagh	1,706	1,463	3,169	597,528	610,571	1,208,099	84,799	86,895	171,694	135	86	22
18	Ranchi	130,114	132,494	262,608	433,323	436,169	869,492	33,778	32,269	66,047	9	4	1
19	Palamau	4,242	4,365	8,607	335,519	334,442	669,961	37,369	37,132	74,501	...	...	...
20	Manbhum	3,922	3,734	7,656	824,012	768,515	1,592,527	61,712	49,665	111,377	2	4	...
21	Singhbhum	10,056	9,496	19,552	237,465	222,610	460,075	16,543	10,211	26,754	153	74	23
	Total for the Province	170,128	171,766	341,894	15,493,257	15,518,217	31,011,474	2,112,814	2,151,976	4,264,790	553	366	91

DIX I—contd.

Districts of Bihar and Orissa Province, during the year 1933—contd.

						4										
Census, 1931.						Number of deaths registered.										
Other classes.			Total.			Christians.			Hindus.			Muhammadans.			No.	
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.		
262	209	471	956,124	890,350	1,846,474	8	3	11	14,936	14,191	29,127	1,629	1,587	3,216	1	
401	365	766	1,193,643	1,194,819	2,388,462	3	1	4	26,304	24,839	51,143	3,077	2,833	5,910	2	
469	444	913	999,099	994,390	1,993,489	1	..	1	18,723	17,711	36,434	1,278	1,305	2,583	3	
16	3	19	1,220,049	1,266,419	2,486,468	...	...	...	24,870	22,771	47,641	3,040	2,641	5,681	4
277	246	523	1,080,956	1,064,731	2,145,687	45	38	83	21,298	18,821	40,119	3,441	2,892	6,333	5	
24	16	40	1,443,847	1,497,178	2,941,025	5	8	13	30,121	29,536	59,657	4,408	4,155	8,563	6	
82	17	99	1,570,959	1,595,135	3,166,094	3	...	3	30,255	28,351	58,606	4,449	3,929	8,378	7	
3,863	3,681	7,544	1,145,797	1,141,357	2,287,154	2	3	5	23,155	21,434	44,589	2,279	2,087	4,366	8	
1,782	1,592	3,374	1,130,584	1,104,048	2,234,632	4	11	15	23,553	20,591	44,144	2,514	1,943	4,457	9	
6,910	6,128	13,038	1,129,681	1,056,862	2,186,543	11	8	19	15,882	14,426	30,308	11,716	10,042	21,758	10	
431,017	434,209	865,226	1,025,921	1,025,551	2,051,472	74	63	137	9,080	7,932	17,012	2,092	1,841	3,933	11	
314	194	508	1,028,134	1,148,573	2,176,707	15	14	29	36,216	38,531	74,747	837	912	1,749	12	
6,223	6,580	12,808	480,518	510,082	990,600	3	6	9	16,396	17,332	33,728	486	471	957	13	
28,249	30,224	58,473	108,925	113,811	222,736	1	...	1	2,014	1,975	3,989	2	...	2	14	
14	4	18	500,214	534,940	1,035,154	12	6	18	16,276	16,966	33,242	279	301	580	15	
1,643	1,693	3,336	431,460	449,485	880,945	13	11	24	11,459	10,400	21,859	27	30	57	16	
67,788	66,386	134,174	751,956	765,401	1,517,357	6	3	9	11,638	10,349	21,987	1,270	1,158	2,428	17	
179,839	189,150	368,989	777,063	790,086	1,567,149	1,976	1,702	3,678	5,445	4,788	10,233	761	701	1,462	18	
32,648	33,019	65,667	409,778	408,958	818,736	90	70	160	8,329	7,491	15,820	674	601	1,275	19	
50,361	48,963	99,324	940,009	870,881	1,810,890	52	42	94	12,135	9,841	21,976	718	578	1,296	20	
205,199	217,990	423,189	469,421	460,381	929,802	67	55	122	3,206	2,763	5,969	99	85	184	21	
1,017,386	1,041,113	2,058,499	18,794,138	18,883,438	37,677,576	2,391	2,044	4,435	361,291	341,039	702,330	45,076	40,092	85,168		

Annual Form No. V.—Deaths registered according to class in the

1	2	3											
No.	District.	Number of deaths registered —concl'd.									Ratio of deaths		
		Buddhists.			Other classes.			Total.			Christians.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
	PATNA DIVISION.												
1	Patna ...	...	...	...	2	1	3	16,575	15,782	32,357	4·0	1·2	3·1
2	Gaya ...	1	...	1	38	34	72	29,423	27,707	57,130	10·1	3·6	7·0
3	Shahabad ...	...	...	...	9	19	28	20,011	19,035	39,046	0·9	...	0·4
	TIRHUT DIVISION.												
4	Saran ...	...	...	...	...	...	...	27,910	25,412	53,322	...	...	...
5	Champaran ...	...	...	...	...	...	...	24,784	21,751	46,535	26·8	19·3	22·7
6	Muzaffarpur ...	...	...	...	...	...	...	34,534	33,639	68,233	10·4	19·7	14·6
7	Darbhanga ...	...	...	...	...	...	...	34,707	32,280	66,987	10·5	...	5·6
	BHAGALPUR DIVISION.												
8	Monghyr ...	...	...	...	3	2	5	25,439	23,526	48,965	1·9	3·5	2·6
9	Bhagalpur ...	...	...	...	12	7	19	26,083	22,552	48,635	4·5	16·2	9·6
10	Purnea ...	...	...	...	131	125	256	27,740	24,601	52,341	11·3	9·4	1·4
11	Santal Parganas ...	...	...	...	6,843	5,682	12,525	18,089	15,518	33,607	11·4	9·1	10·2
	ORISSA DIVISION.												
12	Cuttack ...	...	...	...	...	2	2	37,068	39,459	76,527	12·3	8·5	10·1
13	Balasore ...	...	...	...	94	81	175	16,979	17,890	34,869	4·4	8·7	6·5
14	Angul ...	...	...	...	1,101	1,091	2,192	3,118	3,066	6,184	6·4	...	3·2
15	Puri ...	...	...	...	...	...	...	16,567	17,273	33,840	15·6	7·8	11·7
16	Sambalpur ...	...	...	...	47	42	89	11,546	10,483	22,029	7·3	6·0	6·6
	CHOTA NAGPUR DIVISION.												
17	Hazaribagh ...	...	...	...	434	369	803	13,348	11,879	25,227	3·5	2·0	2·8
18	Ranchi ...	...	...	...	8,417	7,564	15,981	16,599	14,755	31,354	15·2	12·8	14·0
19	Palamau ...	...	...	...	25	12	37	9,118	8,174	17,292	21·2	16·0	18·6
20	Manbhum ...	...	...	...	1,515	1,343	2,858	14,420	11,804	26,224	13·3	11·2	12·3
21	Singhbhum ...	...	...	...	3,478	2,940	6,418	6,850	5,843	12,693	6·6	5·1	5·3
	Total for the Province	1	...	1	22,149	19,314	41,463	439,908	402,489	833,397	14·0	11·9	13·0

X I—contd.

istricts of Bihar and Orissa Province, during the year 1933—conold.

4												5			
1,000 of population.															
Hindus.			Muhammadans.			Buddhists.			Other classes.			Total.			
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	No.
17·5	18·0	17·7	16·1	15·6	15·8	...	...	...	7·6	4·8	6·3	17·3	17·7	17·5	1
24·4	23·5	23·9	26·2	20·9	23·3	76·9	...	52·6	94·7	93·1	94·0	24·6	23·2	23·9	2
20·2	19·4	19·8	17·4	16·7	17·0	...	...	...	19·2	42·8	30·7	20·0	19·2	19·6	3
23·3	20·6	21·9	10·5	16·4	18·3	...	...	...	...	...	...	22·9	20·1	21·4	4
23·6	21·3	22·5	19·6	16·2	17·9	...	...	...	...	...	...	22·9	20·4	21·7	5
23·9	22·9	23·4	23·8	20·1	21·9	...	...	...	...	...	...	23·9	22·6	23·2	6
22·3	20·7	21·5	20·6	17·5	19·0	...	...	...	...	...	...	22·1	20·2	21·2	7
22·4	21·0	21·3	20·9	17·5	19·1	...	...	...	0·8	0·5	0·6	22·2	20·6	21·4	8
23·4	21·0	22·2	20·1	15·6	18·9	...	...	...	6·7	4·4	5·6	23·0	20·4	21·8	9
23·9	23·3	23·6	25·7	23·3	24·5	...	...	...	18·9	20·4	19·6	24·5	23·3	23·9	10
19·1	16·7	17·9	18·6	16·6	17·6	...	...	...	15·9	13·1	14·5	17·6	15·1	16·4	11
36·3	34·7	35·5	27·9	25·2	26·4	...	...	...	...	10·3	3·9	36·0	34·4	35·1	12
35·8	35·6	35·7	31·0	29·3	30·2	...	...	...	15·1	12·3	13·7	35·3	35·1	35·2	13
25·1	23·7	24·4	11·3	...	6·8	...	...	...	39·0	36·1	37·5	28·6	26·9	27·8	14
33·3	32·4	32·8	25·7	25·8	25·7	...	...	...	...	...	...	33·1	32·0	32·7	15
26·9	23·4	25·1	13·4	16·6	14·9	...	...	...	28·6	24·8	26·7	26·8	23·3	25·0	16
19·4	16·9	18·2	14·9	13·3	14·1	...	...	...	6·4	9·7	5·9	17·7	15·5	16·6	17
12·5	10·9	11·7	22·4	21·7	22·1	...	...	...	46·8	37·9	43·3	21·3	18·7	20·0	18
24·8	22·4	23·6	18·0	16·2	17·1	...	...	...	0·8	0·4	0·5	22·2	20·0	21·1	19
14·7	12·8	13·8	11·8	11·6	11·8	...	...	...	30·1	27·4	28·8	15·3	13·5	14·4	20
13·5	12·4	12·9	5·9	8·3	6·8	...	...	...	16·9	13·4	15·2	14·5	12·6	13·6	21
23·3	22·0	22·6	21·3	18·6	20·0	1·8	...	1·1	21·7	18·5	20·1	22·9	21·3	22·1	

Annual Form no. VA.—Death rates according to class, urban and rural areas separately in each district of Bihar and Orissa province during the year 1933.

Number.	Districts.		Christians.	Hindus.	Muhammadans.	Buddhists.	Other classes.	Total.
1	2		3	4	5	6	7	8
1	Patna	... { Urban ...	2.9	13.5	12.9	...	8.4	13.3
		... { Rural ...	4.0	18.3	17.3	...	4.2	18.2
2	Gaya	... { Urban ...	2.0	39.6	33.2	...	15.4	38.6
		... { Rural ...	44.8	23.3	22.2	55.6	6.2	23.2
3	Shahabad	... { Urban ...	2.3	5.5	6.8	...	5.0	5.8
		... { Rural ...	...	20.5	19.7	...	214.3	20.4
4	Saran	... { Urban ...	...	18.0	14.8	...	...	17.1
		... { Rural ...	...	21.9	18.6	...	...	21.5
5	Champaran	... { Urban ...	29.7	9.5	10.3	...	...	10.5
		... { Rural ...	15.8	22.7	18.2	...	...	21.9
6	Muzaffarpur	... { Urban ...	9.1	18.6	15.0	...	...	17.7
		... { Rural ...	23.8	23.5	22.2	...	...	23.4
7	Darbhanga	... { Urban ...	5.3	19.0	17.7	...	...	18.6
		... { Rural ...	6.5	21.7	19.1	...	...	21.2
8	Monghyr	... { Urban ...	1.5	14.2	12.2	...	200.0	13.6
		... { Rural ...	5.0	22.1	19.6	...	0.5	21.7
9	Bhagalpur	... { Urban ...	5.1	16.5	8.5	...	11.4	14.4
		... { Rural ...	14.1	22.5	18.8	...	5.3	22.1
10	Purnea	... { Urban ...	6.4	7.8	9.6	...	...	8.3
		... { Rural ...	11.2	23.9	24.8	...	19.8	24.3
11	Santal Parganas	... { Urban ...	4.0	3.4	1.3	...	1.1	3.0
		... { Rural ...	10.6	18.5	18.2	...	14.5	16.7
12	Cuttack	... { Urban ...	10.3	15.4	11.2	...	18.5	14.6
		... { Rural ...	8.8	36.2	30.2	...	2.2	36.0
13	Balasore	... { Urban ...	6.2	27.0	23.2	...	37.9	25.8
		... { Rural ...	6.7	35.8	31.0	...	13.4	35.4
14	Angul	... { Urban ...	...	...	...	...	...	...
		... { Rural ...	3.2	24.4	6.8	...	37.5	27.8
15	Puri	... { Urban ...	10.0	32.8	25.2	...	...	32.6
		... { Rural ...	11.9	...	25.7	...	...	32.7
16	Sambalpur	... { Urban ...	4.1	20.4	9.6	...	...	19.2
		... { Rural ...	6.8	25.2	17.3	...	27.1	25.1
17	Hazaribagh	... { Urban ...	...	7.1	4.9	...	...	6.2
		... { Rural ...	4.3	18.6	14.9	...	6.0	16.9
18	Ranchi	... { Urban ...	2.4	7.3	9.2	...	16.0	7.6
		... { Rural ...	14.3	11.3	25.6	...	43.5	20.5
19	Palamau	... { Urban ...	...	5.9	7.2	...	...	6.1
		... { Rural ...	16.0	23.9	17.4	...	0.6	21.3
20	Manbhum	... { Urban ...	1.2	10.9	9.3	...	723.4	10.9
		... { Rural ...	15.4	13.9	11.8	...	28.4	14.6
21	Singhbhum	... { Urban ...	3.4	6.0	4.5	...	4.6	5.6
		... { Rural ...	7.3	14.4	13.4	...	15.3	14.8
Total for the Province			6.0	16.0	13.2	...	25.0	14.4
			13.5	22.9	20.5	1.2	20.1	22.4

APPENDIX I.

Annual Form No. VI.

Annual Form No. VI.—Deaths registered from different causes in the

1	2	3			4			5			6	7	8	9	10	11
No.	Districts and Towns.	Population according to census of 1931.			Births.			Birth rates.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.						
DISTRICTS EXCLUDING TOWNS.																
PATNA DIVISION.																
1	Patna	811,800	776,390	1,588,190	29,606	28,179	57,785	18·7	17·7	36·4	79	1,078	...	16,783	435	690
2	Gaya	1,134,074	1,149,203	2,283,277	52,268	51,002	103,270	22·9	22·3	45·2	31	4,865	...	36,543	47	38
3	Shahabad	936,943	938,911	1,875,859	41,158	37,792	78,950	21·9	20·1	42·0	35	2,406	4	26,371	13	53
TIRHUT DIVISION.																
4	Saran	1,181,847	1,234,146	2,415,993	45,062	42,779	87,841	18·6	17·7	36·3	131	3,784	370	29,366	307	643
5	Champaran	1,055,771	1,044,430	2,100,201	38,098	36,637	74,735	18·1	17·4	35·5	500	2,510	9	35,629	14	9
6	Muzaffarpur	1,397,930	1,460,854	2,858,784	53,623	51,050	104,673	18·8	17·8	36·6	332	2,589	603	54,759	30	51
7	Darbhanga	1,518,105	1,549,764	3,067,869	53,811	50,953	104,764	17·5	16·6	34·1	1,598	1,703	526	54,106	117	7
BHAGALPUR DIVISION.																
8	Monghyr	1,101,576	1,102,369	2,203,945	44,634	41,881	86,515	20·2	19·0	39·2	429	3,088	105	34,135	65	20
9	Bhagalpur	1,081,084	1,064,468	2,145,553	35,430	33,904	69,334	16·5	15·8	32·3	2,545	2,424	...	37,604	46	26
10	Parnea	1,101,882	1,038,438	2,140,320	35,476	32,176	67,652	16·6	15·0	31·6	428	2,027	...	46,279	20	7
11	Santal Parganas	998,960	1,003,976	2,002,936	31,682	30,246	61,928	15·8	15·1	30·9	342	655	..	28,792	106	244
ORISSA DIVISION.																
12	Cuttack	980,266	1,107,885	2,088,151	41,048	38,640	79,688	19·6	18·5	38·1	8,088	5,048	...	30,348	8,739	1,118
13	Balasore	470,385	502,372	972,757	17,544	16,464	34,008	18·0	16·9	34·9	1,405	912	...	19,337	477	48
14	Angul	108,925	113,811	222,736	5,425	5,212	10,637	24·3	23·4	47·7	23	3	...	5,042	42	11
15	Puri	479,511	518,075	997,586	21,449	20,401	41,850	21·5	20·4	41·9	924	4,413	...	9,666	3,616	1,125
16	Sambalpur	423,744	442,184	865,928	18,134	17,176	35,310	20·9	19·8	40·7	14	815	...	8,948	1,316	1,032
CHOTA NAGPUR DIVISION.																
17	Hazaribagh	725,619	740,881	1,466,500	27,413	26,987	54,400	18·7	18·4	37·1	10	539	...	20,104	36	78
18	Ranchi	743,329	762,726	1,506,055	25,128	24,733	49,861	16·7	16·3	33·0	...	781	...	24,908	511	41
19	Palamanu	403,177	403,519	806,696	16,485	16,145	32,630	20·4	20·0	40·4	1	306	...	13,833	10	8
20	Manbhum	908,615	845,822	1,754,437	27,448	26,212	53,660	15·7	14·9	30·6	36	205	...	22,220	61	100
21	Singhbhum	401,278	414,039	815,367	12,232	12,103	24,335	15·0	14·8	29·8	68	81	...	10,425	12	14
Total for the province.		17,967,826	18,214,373	36,182,199	673,154	640,672	1,313,826	18·6	17·7	36·3	17,019	40,232	1,617	565,198	16,019	5,365
TOWNS.																
PATNA DISTRICT.																
1	Patna City	92,238	67,452	159,690	1,574	1,308	2,882	9·8	8·2	18·0	70	163	...	889	110	235
2	Bihar	24,532	22,462	46,994	393	374	767	8·4	7·9	16·3	7	21	...	158	16	21
3	Dinapore	12,347	11,874	24,221	287	257	544	11·9	10·6	22·5	7	9	...	97	14	15
4	Barh	5,179	4,571	9,750	85	54	139	8·7	5·5	14·2	...	1	...	37	6	5
5	Khagole	4,119	3,293	7,412	91	61	142	12·3	6·9	19·2	1	5	...	34	1	4
GAYA DISTRICT.																
6	Gaya	50,625	37,380	88,005	1,184	1,090	2,274	13·4	12·4	25·8	13	1,167	...	1,458	106	112
7	Tikari	26,837	2,794	5,481	108	111	219	19·7	20·2	39·9	...	10	...	58	...	1
8	Dandnagar	6,257	5,442	11,699	256	237	493	21·9	20·2	42·1	...	9	...	146	...	3

DIX I—contd.

districts and towns of Bihar and Orissa Province, during the year 1933—contd.

12						13	14			15														16	
Injuries.						All other causes.	Total deaths from all causes.			Ratio of deaths per 1,000 of population.														No.	
Suicide.		Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.		Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.							
Male.	Female.																	Male.	Female.	Total.	Male.	Female.	Total.		Mean of previous five years.
58	111	146	209	8	532	9,328	14,778	14,147	28,925	0.05	0.7	...	10.6	0.3	0.4	0.3	5.8	18.2	18.2	18.2	25.3	1			
40	39	180	266	11	536	11,006	27,339	25,727	53,068	0.01	2.1	...	16.0	0.02	0.02	0.2	4.8	24.1	22.4	23.2	27.5	2			
58	50	165	155	13	441	9,040	19,675	18,688	38,363	0.2	1.3	0.002	14.1	0.007	0.03	0.2	4.8	20.9	19.9	20.4	26.4	3			
39	64	355	445	4	907	16,602	27,825	24,827	52,112	0.05	1.5	0.1	12.1	0.1	0.2	0.3	6.9	33.1	20.1	21.5	24.9	4			
25	11	155	407	...	598	6,787	24,545	21,511	46,056	0.2	1.1	0.004	16.9	0.006	0.004	0.3	3.2	23.2	20.6	21.9	23.3	5			
29	41	535	686	7	1,298	7,115	33,769	33,008	66,777	0.1	0.9	0.2	19.1	0.01	0.02	0.4	2.5	24.2	22.6	23.4	28.4	6			
22	21	597	618	10	1,268	5,837	33,735	31,427	65,162	0.05	0.6	0.2	17.6	0.03	0.002	0.4	1.9	23.2	20.3	21.2	26.5	7			
10	14	152	412	5	593	9,399	24,892	22,942	47,834	0.2	1.4	0.05	15.5	0.03	0.009	0.3	4.3	22.6	20.8	21.7	26.0	8			
30	21	152	336	7	546	4,157	25,338	21,959	47,347	1.2	1.1	...	17.5	0.02	0.02	0.2	1.9	23.5	20.6	22.1	23.7	9			
54	48	43	359	6	510	2,685	27,551	24,405	51,956	0.2	0.9	...	21.6	0.009	0.003	0.2	1.2	25.0	23.5	24.3	22.4	10			
86	67	73	142	8	376	2,045	18,008	15,452	33,460	0.1	0.3	...	14.3	0.05	0.1	0.1	1.4	18.0	15.4	16.7	18.2	11			
91	346	476	191	37	1,141	20,748	36,343	38,887	75,230	3.9	2.4	...	14.5	4.2	0.5	0.5	9.9	37.1	35.1	36.0	30.2	12			
55	94	205	151	...	505	11,725	16,735	17,674	34,409	1.4	0.9	...	19.9	0.5	0.04	0.5	12.1	35.6	35.2	35.4	29.3	13			
18	23	66	85	3	218	845	13,118	3,066	6,184	0.1	0.01	...	22.6	0.2	0.05	1.0	3.8	28.6	26.0	27.8	25.4	14			
40	77	239	120	10	486	12,385	15,878	16,737	32,615	0.9	4.4	...	9.7	3.6	1.1	0.5	13.4	33.1	32.3	32.7	27.6	15			
25	19	148	70	3	265	9,850	11,373	10,367	21,740	0.01	0.9	...	10.3	1.5	1.2	0.3	10.8	26.8	23.4	25.1	25.6	16			
53	80	139	69	...	371	3,769	13,189	11,718	24,907	0.01	0.3	...	13.7	0.02	0.05	0.2	2.5	18.1	15.8	16.9	21.6	17			
36	35	126	115	1	313	4,359	16,376	14,536	30,912	...	0.5	...	16.5	0.3	0.03	0.2	2.9	21.9	19.1	20.5	20.6	18			
25	26	65	113	16	245	2,816	9,081	8,138	17,219	0.00	0.4	...	17.1	0.01	0.01	0.3	3.5	22.5	20.2	21.3	28.9	19			
40	27	117	118	3	305	2,677	14,064	11,540	25,604	0.02	0.1	...	12.6	0.03	0.06	0.2	1.5	15.5	13.6	14.6	15.9	20			
18	31	51	172	2	274	1,133	6,467	5,580	12,047	0.08	0.1	...	12.7	0.01	0.02	0.3	1.4	16.1	13.4	14.8	15.4	21			
852	1,248	4,205	5,269	154	11,728	154,747	419,589	392,336	811,925	0.5	1.1	0.04	15.6	0.4	0.1	0.3	4.3	23.3	21.5	22.4	24.6				
...	...	43	32	5	80	875	1,300	1,122	2,422	0.4	1.0	...	5.6	0.7	1.5	0.5	5.4	14.1	16.6	15.2	10.4	1			
2	1	3	1	...	7	99	180	149	329	0.1	0.4	...	3.4	0.3	0.4	0.2	2.1	7.4	6.6	7.0	11.0	2			
2	...	6	4	2	14	97	120	133	253	0.3	0.3	...	4.0	0.6	0.6	0.6	4.0	9.7	11.2	10.4	20.0	3			
...	...	4	...	...	4	24	49	28	77	...	0.1	...	3.8	0.6	0.5	0.4	2.4	9.5	6.6	7.9	20.6	4	
...	...	4	...	...	4	22	30	41	71	0.1	0.7	...	4.6	0.1	0.5	0.5	2.9	7.3	12.4	9.6	15.9	5	
1	2	114	3	2	122	770	1,916	1,832	3,748	0.1	13.3	...	16.6	1.2	1.3	1.4	8.7	37.8	49.1	42.6	32.0	6			
...	...	1	...	...	1	18	46	42	83	...	1.8	...	10.6	...	0.2	0.2	3.3	17.2	15.0	16.1	25.2	7	
...	...	4	...	1	5	65	122	106	228	...	0.8	...	12.5	...	0.2	0.4	5.6	19.5	19.5	19.5	16.6	8			

Annual Form No. VI.—Deaths registered from different causes in the

1	2	3			4			5			6	7	8	9	10	11
No.	Districts and Towns.	Population according to census of 1931.			Births.			Birth rate.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.						
	TOWNS—contd.															
	SHAHABAD DISTRICT.															
9	Arrah ...	26,635	22,287	48,922	298	238	536	6.1	4.8	10.9	...	6	...	102	11	1
10	Buxar ...	7,420	6,019	13,440	198	174	372	14.7	12.9	27.6	1	8	...	67	4	...
11	Dumraon ...	7,602	6,819	14,421	205	195	400	14.2	13.5	27.7	1	1	...	30	2	...
12	Jagadispur ...	4,791	4,870	9,661	130	119	249	13.4	12.3	25.7	...	9	...	38	4	...
13	Safaram ...	12,473	12,702	25,175	325	256	581	12.9	10.1	23.0	...	60	...	115	5	...
14	Bhabhua ...	3,220	2,782	6,002	105	83	188	17.5	13.8	31.3	...	5	...	36	2	...
	SARAN DISTRICT.															
15	Chapra... ..	25,934	21,514	47,448	600	370	970	12.6	7.8	20.4	3	43	...	327	36	50
16	Revelganj ...	4,297	4,525	8,812	222	195	417	25.2	22.1	47.3	1	10	...	141	6	1
17	Siwan	7,981	6,234	14,215	291	268	559	20.4	16.9	39.3	...	19	...	104	...	...
	CHAMPARAN DISTRICT.															
18	Bettiah	14,659	18,282	27,941	353	316	669	12.6	11.3	23.9	...	42	...	163	...	...
19	Motihari	10,526	7,019	17,545	203	181	384	11.6	10.3	21.9	22	75	...	13	...	...
	MUZAFFARPUR DISTRICT.															
20	Muzaffarpur ...	25,050	17,999	43,049	680	581	1,261	15.8	13.5	29.3	2	18	...	272	26	3
21	Sitamarhi	6,255	4,446	10,701	244	210	454	22.8	19.6	42.4	2	6	...	149	11	...
22	Hajipur	9,936	9,363	19,299	369	344	733	20.2	17.7	37.9	1	17	13	147	19	1
23	Lalganj... ..	4,676	4,516	9,192	182	157	339	19.8	17.1	36.9	...	3	...	110	11	...
	DARBHANGA DISTRICT.															
24	Darbhanga	32,274	28,402	60,676	1,171	1,048	2,219	19.3	17.3	36.6	...	52	...	397	42	3
25	Roserah	4,533	4,336	8,869	145	120	265	16.3	13.5	29.8	...	9	...	60	...	...
26	Samastipur	6,101	3,790	9,891	141	127	268	14.3	12.8	27.1	...	8	...	41	1	...
27	Madhubani	9,946	8,843	18,789	366	352	718	19.5	18.7	38.2	44	...	2	85	11	...
	MONGHYR DISTRICT.															
28	Monghyr	27,843	25,020	52,863	863	761	1,624	16.3	14.4	30.7	25	28	3	314	30	3
29	Jamalpur	16,378	13,968	30,346	558	539	1,097	18.4	17.7	36.1	5	27	...	212	5	...
	BHAGALPUR DISTRICT.															
30	Bhagalpur	46,868	36,979	83,847	939	801	1,740	11.2	9.5	20.7	17	234	...	582	25	3
31	Colgong	2,632	2,601	5,233	88	92	180	16.8	17.6	34.4	15	3	...	58	2	...
	PURNEA DISTRICT.															
32	Purnea	9,255	6,219	15,474	133	107	240	8.6	6.9	15.9	...	...	...	126	9	...
33	Kishanganj	5,817	3,129	8,946	73	61	134	8.2	6.8	15.0	...	2	...	68	1	...
34	Katihar	9,014	6,850	15,864	99	52	151	6.2	3.3	9.5	...	20	...	46	2	...
35	Forbesganj	3,712	2,226	5,939	86	58	174	14.5	14.8	29.3	...	2	...	51	8	...

IXI—contd.

districts and towns of Bihar and Orissa Province, during the year 1933—contd.

12					13	14			15													16
Injuries.					All other causes.	Total deaths from all causes.			Ratio of deaths per 1,000 of population.													No.
Suicide.	Female.	Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.		Total.	Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.				
																		Male.	Female.	Total.	Mean of previous five years.	
	1	8	...	1	10	38	94	87	181	...	0.1	...	2.1	0.2	0.3	0.2	0.8	3.5	3.9	3.7	7.0	9
	...	...	...	...	...	23	54	51	105	0.07	0.06	...	5.0	0.3	0.2	...	1.7	7.3	8.5	7.8	11.0	10
	...	...	1	...	1	17	27	26	53	0.06	0.07	...	2.1	0.1	0.07	0.07	1.2	3.5	3.8	3.7	3.5	11
	...	2	1	...	3	24	36	50	86	...	0.9	...	3.9	0.4	0.8	0.3	2.5	7.5	10.2	8.9	13.0	12
	...	...	...	...	...	22	97	106	203	...	2.4	...	4.6	0.2	0.04	...	0.9	7.7	8.3	8.0	10.1	13
	...	...	1	...	1	11	28	27	55	...	0.8	...	6.0	0.3	...	0.2	1.8	8.7	9.7	9.1	12.8	14
7	3	22	5	3	40	275	899	377	776	0.06	0.9	...	6.9	0.7	1.0	0.8	5.8	15.8	17.5	16.3	19.8	15
	...	2	1	...	3	66	123	116	239	0.1	1.1	...	16.0	0.7	1.3	0.3	7.5	25.6	25.6	27.1	23.8	16
	..	3	...	...	3	65	103	62	195	...	1.3	...	7.3	...	0.3	0.2	4.6	12.9	14.7	13.7	16.3	17
	...	...	...	...	...	27	116	116	232	...	1.5	...	5.8	...	...	...	1.0	7.9	8.7	8.3	7.9	18
	...	3	1	...	4	32	123	124	247	1.3	4.3	...	6.4	...	0.06	0.2	1.8	11.7	17.7	14.1	12.5	19
1	1	19	1	1	23	238	352	262	614	0.04	0.4	...	6.3	0.6	0.8	0.5	5.5	14.0	14.6	14.3	18.2	20
	...	12	...	...	12	96	141	137	278	0.2	0.6	...	13.9	1.0	0.2	1.1	9.0	23.5	30.8	26.0	19.0	21)
2	1	12	1	...	16	128	171	189	360	0.05	0.9	0.7	7.6	1.0	1.0	0.8	6.5	17.2	20.2	18.6	23.5	22
	...	2	2	...	4	72	101	103	204	...	0.3	...	11.9	1.2	0.4	0.4	7.8	21.6	23.0	22.2	23.9	23
1	2	34	12	...	49	792	730	635	1,365	...	0.9	...	6.5	0.6	0.5	0.8	13.1	22.6	22.4	22.5	23.8	24
	...	...	...	...	...	43	54	59	113	...	1.0	...	6.8	...	0.1	...	4.8	11.9	13.6	12.7	16.0	25
	...	...	...	...	...	69	60	64	124	...	0.8	...	4.1	0.1	0.5	...	7.0	9.8	16.9	12.5	13.4	26
	...	1	...	...	1	77	128	95	223	2.3	...	0.1	4.5	0.6	0.2	0.05	4.1	13.9	10.7	11.9	15.8	27
1	3	16	1	2	23	216	316	362	678	0.5	0.5	0.06	5.9	0.3	0.7	0.4	4.1	11.3	14.5	12.8	16.6	28
..	...	3	1	...	4	195	231	222	453	0.2	0.9	...	7.0	0.2	0.2	0.1	6.4	14.1	15.9	15.0	19.8	29
5	3	14	2	...	24	272	644	548	1,192	0.2	2.7	...	6.9	0.3	0.4	0.2	3.2	13.7	14.8	14.2	11.6	30
1	1	1	...	...	3	15	51	45	96	2.8	0.5	...	11.1	0.4	...	0.5	2.8	19.3	17.3	18.3	23.9	31
...	...	...	1	...	1	17	67	89	156	...	...	...	8.1	0.6	0.2	0.06	1.1	7.2	14.3	10.1	13.4	32
...	...	...	...	...	...	1	35	38	73	..	0.2	...	7.6	0.1	0.1	...	0.1	6.1	13.1	8.2	9.7	33
...																	
...	...	1	1	...	2	10	53	37	90	...	1.8	...	2.9	0.1	0.06	0.1	0.6	5.9	5.4	5.7	5.2	34
1	...	1	...	...	2	...	34	32	66	...	0.3	...	8.6	1.3	0.5	0.3	...	9.1	14.4	11.1	12.6	35

Annual Form No. VI.—Deaths registered from different causes in

1	2	3			4			5			6	7	8	9	10	11
No.	District and Town.	Population according to census of 1931.			Births.			Birth rate.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.						
	TOWNS—concl'd.															
	SANTAL PARGANAS DISTRICT.															
36	Sahibganj ...	8,530	7,353	15,883	78	43	121	4.9	2.7	7.6	...	2	...	32	...	
37	Deoghar ...	8,117	6,100	14,217	82	70	152	5.7	4.9	10.6	...	...	...	24	...	
38	Dumka ...	5,317	4,154	9,471	81	55	136	8.5	5.8	14.3	...	1	...	26	...	
39	Madhupur ...	4,997	3,968	8,965	37	20	57	4.1	2.2	6.3	...	...	...	14	1	
	CUTTACK DISTRICT.															
40	Cuttack...	36,357	28,906	65,263	510	449	959	7.8	6.9	14.7	115	9	...	173	90	
41	Kendrapara ...	6,237	6,383	12,620	201	160	361	15.9	12.7	28.6	47	5	...	143	32	
42	Jajpur ...	5,274	5,399	10,673	140	122	262	13.1	11.4	24.5	37	8	...	114	18	
	BALASORE DISTRICT.															
43	Balasore ...	10,133	7,710	17,843	196	195	391	11.0	10.9	21.9	37	6	...	144	39	
	PURI DISTRICT.															
44	Puri ...	20,703	16,865	37,568	401	374	775	10.7	9.9	20.6	12	59	...	418	261	
	SAMBALPUR DISTRICT.															
45	Sambalpur ...	7,716	7,301	15,017	262	203	465	17.4	13.5	30.9	...	1	...	95	39	
	HAZARIBAGH DISTRICT.															
46	Hazaribagh ...	10,903	10,074	20,977	281	243	524	13.3	11.6	24.9	...	21	...	115	1	
47	Chatra ...	4,312	4,446	8,758	83	100	183	9.8	11.4	21.2	...	...	...	44	...	
48	Giridih ...	11,122	10,000	21,122	138	124	262	6.6	5.8	12.4	...	8	...	54	5	
	RANCHI DISTRICT.															
49	Ranchi ...	26,918	23,599	50,517	333	238	576	6.7	4.7	11.4	...	195	...	85	6	
50	Lohardaga ...	3,816	3,761	7,577	283	238	576	38.0	38.0	76.0	...	4	...	44	9	
	PALAMAU DISTRICT.															
51	Daltonganj ...	6,601	5,439	12,040	108	85	193	9.0	7.0	16.0	1	...	...	31	7	
	MANBHUM DISTRICT.															
52	Purulia ...	14,388	11,586	25,974	259	229	488	9.9	8.8	18.7	...	...	...	177	...	
53	Raghunathpur ..	3,654	3,485	7,139	109	111	220	15.3	15.5	30.8	...	...	...	122	...	
54	Jhalda ...	3,470	3,454	6,924	110	95	205	15.9	13.7	29.6	...	2	...	85	...	
55	Dhanbad ...	9,882	6,476	16,356	132	119	251	8.0	7.3	15.3	1	5	...	35	...	
	SINGHBHUM DISTRICT.															
56	Chaibassa ...	5,716	5,069	10,785	212	168	380	19.6	15.6	35.2	...	...	...	125	5	
57	Chakradharpur ..	6,215	4,976	11,191	103	75	178	18.9	15.0	33.9	...	9	...	63	1	
58	Jugsalai ...	5,075	3,646	8,721	143	104	247	16.4	11.9	28.3	...	1	...	39	2	
59	Jamshedpur ...	51,137	32,601	83,738	229	188	417	2.7	2.2	4.9	8	...	...	177	2	
(a)	Total for all Towns	820,403	664,757	1,485,160	17,589	15,175	32,764	11.8	10.2	22.0	495	2,437	18	9,215	1,936	92
(a)	Total for the whole Province.	18,788,229	18,879,130	37,667,359	690,743	653,847	1,346,590	18.3	17.4	35.7	17,514	42,669	1,635	574,413	17,055	6,28

(a) Excluding cantonment population.

K I—contd.

Districts and towns of Bihar and Orissa Province, during the year 1933—concl'd.

12					13	14			15														16
Injuries.					All other causes.	Total deaths from all causes.			Ratio of deaths per 1,000 of population.														No.
Homicide.	Female.	Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.		Total.	Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.					
																		Male.	Female.	Total.	Mean of previous five years.		
...	...	...	...	...	8	20	22	42	...	0.1	...	2.0	...	...	...	0.5	2.3	2.9	2.6	4.0	36	
...	...	1	...	...	1	23	28	23	50	...	...	...	1.7	...	0.1	0.07	1.6	3.4	3.6	3.5	4.2	37
...	...	...	...	...	...	9	23	15	38	...	0.1	...	2.7	...	0.2	...	0.9	4.3	3.6	4.0	4.7	38
...	...	...	...	...	...	2	10	7	17	...	...	...	1.5	0.1	...	...	0.2	2.0	1.8	1.9	4.3	39
...	...	14	2	1	23	372	426	281	707	1.8	0.1	...	2.6	1.4	0.4	0.3	4.2	11.7	9.7	10.8	8.8	40	
...	2	5	...	...	8	107	181	186	361	3.7	0.4	...	11.3	2.5	1.5	0.6	8.5	29.0	28.2	28.6	35.0	41
...	...	1	3	...	4	44	118	111	229	3.4	0.7	...	10.7	1.7	0.4	0.4	4.1	22.4	20.5	21.3	20.9	42	
...	1	6	...	...	8	213	244	216	460	2.1	0.3	...	8.1	1.6	1.3	0.4	11.9	14.0	28.0	25.8	17.1	43
...	4	9	2	...	20	347	689	536	1,225	0.3	1.5	...	11.1	6.9	2.8	0.5	9.2	33.2	31.8	32.6	33.0	44	
...	...	4	2	...	7	118	173	116	289	...	0.06	...	6.3	2.6	1.9	0.5	7.9	22.4	15.9	19.2	23.2	45	
...	1	1	...	...	2	34	80	94	174	...	1.0	...	5.5	0.04	0.04	0.1	1.6	7.3	9.2	8.3	8.5	46
...	1	...	3	...	4	14	31	31	62	...	...	...	5.0	...	...	0.4	1.6	7.1	6.9	7.1	20.1	47
...	...	1	...	...	1	15	48	36	84	...	0.4	...	2.5	0.2	0.04	0.05	0.7	4.3	3.6	3.9	6.5	48
...	...	6	...	...	7	59	178	178	356	...	3.8	...	1.7	0.1	0.1	0.3	1.1	6.6	7.5	7.4	4.2	49
...	...	1	...	...	1	28	45	41	86	...	0.5	...	5.8	1.2	...	0.1	3.6	11.8	10.9	11.3	15.6	50
...	3	4	1	...	9	23	37	36	73	0.08	...	...	2.6	0.6	0.2	0.7	1.9	5.6	6.6	6.1	5.1	51
...	...	...	1	...	1	28	121	85	206	...	...	...	6.8	...	...	0.04	1.1	8.4	7.3	7.9	8.7	52
...	...	...	...	...	...	2	68	57	125	...	...	...	17.1	...	0.1	...	0.3	18.6	16.4	17.5	20.4	53
...	...	2	...	...	2	20	07	44	111	...	0.3	...	12.2	...	0.3	0.3	2.9	19.3	12.7	16.0	11.8	54
...	...	17	...	...	17	114	100	78	178	0.1	0.3	...	2.1	...	0.4	1.0	6.9	10.1	12.0	10.9	4.2	55
...	...	...	...	...	...	28	91	69	160	...	...	...	11.6	0.4	0.2	...	2.6	15.8	13.5	14.8	15.0	56
...	...	...	1	...	2	24	55	51	106	...	0.8	...	6.1	0.08	0.2	0.2	2.1	8.8	10.2	9.5	0.0	57
...	...	1	...	...	3	1	28	20	48	...	0.1	...	4.5	0.2	0.2	0.3	0.1	5.5	5.4	5.5	7.4	58
...	2	26	...	...	30	111	209	123	332	0.1	...	...	2.1	0.02	0.05	0.3	1.3	4.1	3.7	3.9	...	59
...	32	434	87	18	616	6,455	11,201	9,991	21,192	0.3	1.6	0.01	6.2	0.7	0.6	0.4	4.3	13.6	15.0	14.3	14.8	...	
...	1,280	4,639	5,356	172	12,344	161,202	430,790	402,327	833,117	0.5	1.1	0.04	15.2	0.4	0.2	0.3	4.3	22.9	21.3	22.1	24.2	...	

Births and Deaths registered in the cantonment of

1	2	3	4			5	6	7	8	9	10						
No.	Name of cantonment.	Indian non-military population according to Census of 1931.			Births.			Birth-rate.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.							
1	Dinapur	5,909	4,308	10,217	171	187	358	16·7	18·3	35·0	...	5	...	135	9

FORM No. VI.

Bihar and Orissa Province, during the year 1933.

11						12	13			14												15
Injuries.						All other causes.	Total deaths from all causes.			Ratio of deaths per 1,000 of population.								All causes.			No.	
Male.	Female.	Wounds or accidents.	Snake-bite or killed by wild animals.	Rabies.	Total.		Male.	Female.	Total.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	Male.	Female.	Total.		
..	..	3	..	..	3	118	116	162	280	...	0·5	...	13 2	0·9	1·0	0·3	11·5	19·9	37·6	27·4	1

Annual Form No. VII.—Deaths registered from Cholera in the

1	2	3	4	5								
No.	District.	Circles of registration.		Villages.		January.	February.	March.	April.	May.	June.	July.
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.							
PATNA DIVISION.												
1	Patna	19	15	2,315	35	...	3	6	12	5	12	4
2	Gaya	16	9	6,058	28	...	1	3	3	5	2	4
3	Shahabad	17	6	4,735	14	2	1	...	...	2	...	...
	Total	52	30	13,108	77	2	5	9	15	12	14	8
TIRHUT DIVISION.												
4	Saran	13	9	4,305	9	...	...	5	14	3	...	...
5	Champaran	11	8	2,546	77	...	...	...	1	6	...	6
6	Muzaffarpur	14	12	4,059	135	1	...	5	2	13	1	35
7	Darbhanga	14	8	3,135	120	...	...	4	...	...	1	...
	Total	52	37	14,047	341	1	...	14	17	22	2	41
BHAGALPUR DIVISION.												
8	Monghyr	13	9	2,610	72	...	...	2	2	...	1	2
9	Bhagalpur	14	14	3,080	172	15	5	1	12	27	16	50
10	Purnea	17	11	4,160	115	70	3	6	11	21	11	1
11	Santal Parganas	10	5	10,160	22	10	4	3	35	53	90	22
	Total	54	39	20,010	381	95	12	12	60	101	118	75
ORISSA DIVISION.												
12	Cuttack	13	13	5,506	1,060	471	364	384	505	203	12	171
13	Balasore	10	9	3,479	529	177	30	8	22	50	34	27
14	Angul	2	2	1,608	7	...	...	...	8	1	5	5
15	Puri	6	6	2,987	283	1	5	3	33	31	12	29
16	Sambalpur	23	3	1,943	8	...	...	...	12	1	1	...
	Total	54	33	15,523	2,492	589	399	395	580	286	64	232
CHOTA NAGPUR DIVISION.												
17	Hazaribagh	21	3	6,087	3	...	...	...	...	7	...	2
18	Ranchi	32	...	3,838	...	...	...	...	...	...	...	...
19	Palamanu	10	2	3,134	2	...	...	...	...	...	2	...
20	Manbhum	35	15	4,642	33	6	...	7	4	8	3	2
21	Singhbhum	15	4	3,013	17	...	...	...	15	...	...	7
	Total	113	24	20,714	55	6	...	7	19	15	5	11
	Total for the Province	325	163	83,402	3,346	693	416	437	691	436	203	367

DIX I—contd.

districts of Bihar and Orissa Province, during each month of the year 1933.

					6			7			8	1
August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
					Male.	Female.	Total.	Male.	Female.	Total.		
39	28	21	18	16	101	63	164	0·1	0·1	0·1	2·2	1
10	11	1	2	2	20	24	44	0·1	0·02	0·02	2·7	2
13	2	...	8	9	20	17	37	0·02	0·02	0·02	2·2	3
62	41	22	28	27	141	104	245	0·04	0·03	0·04	2·4	
60	47	2	...	4	65	70	135	0·05	0·05	0·05	1·5	4
114	157	158	63	17	267	255	522	0·2	0·2	0·2	2·5	5
108	64	48	47	13	175	162	337	0·1	0·1	0·1	3·8	6
...	124	684	746	83	750	892	1,642	0·5	0·6	0·5	4·2	7
282	392	892	856	117	1,257	1,379	2,636	0·2	0·2	0·2	3·1	
50	70	153	156	23	255	204	459	0·2	0·1	0·2	2·7	8
220	367	836	775	253	1,438	1,139	2,577	1·3	1·0	1·1	2·6	9
15	26	152	96	16	218	210	428	0·2	0·2	0·2	1·4	10
10	...	6	56	53	163	159	342	0·1	0·1	0·2	0·5	11
295	463	1,147	1,083	345	2,094	1,712	3,806	0·5	0·4	0·4	1·8	
1,003	1,500	1,680	1,464	530	3,997	4,290	8,287	3·9	3·7	3·8	2·0	12
13	73	513	205	350	684	758	1,442	1·4	1·5	1·5	1·9	13
2	2	...	...	...	9	14	23	0·08	0·1	0·1	0·004	14
293	196	133	125	75	421	515	936	0·3	0·9	0·9	2·0	15
...	...	...	...	...	7	7	14	0·01	0·01	0·01	0·2	16
1,311	1,771	2,326	1,794	955	5,118	5,584	10,702	2·1	2·0	2·0	1·6	
...	...	1	...	...	7	3	10	0·01	0·004	0·01	1·1	17
...	...	...	...	...	...	...	...	...	...	...	0·2	18
...	...	...	...	...	2	...	2	0·005	...	0·002	1·4	19
1	...	1	4	1	23	14	37	0·02	0·02	0·02	0·4	20
2	36	8	3	5	35	41	76	0·07	0·08	0·08	0·09	21
3	36	10	7	6	67	58	125	0·02	0·01	0·02	0·6	
1,953	2,703	4,397	3,768	1,450	8,677	8,837	17,514	0·5	0·5	0·5	2·0	

Annual Form No. VIII.--Deaths registered from small-pox in the

1	2	3	4	5							
No.	District.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.						
PATNA DIVISION.											
1	Patna	19	19	2,315	384	104	118	184	270	293	120
2	Gaya	16	16	6,058	2,589	564	629	818	1,277	1,156	772
3	Shahabad	17	17	4,735	677	207	280	268	318	548	382
	Total	52	52	13,108	3,650	875	1,027	1,270	1,865	1,997	1,274
TIRHUT DIVISION.											
4	Saran	13	13	4,315	689	234	346	428	784	1,052	587
5	Champanan	11	11	2,548	642	121	128	200	471	937	491
6	Muzaffarpur	14	14	4,059	615	96	110	247	641	853	477
7	Darbhanga	14	13	3,135	150	112	119	190	399	447	327
	Total	52	51	14,047	2,096	583	703	1,065	2,295	3,289	1,882
BHAGALPUR DIVISION.											
8	Monghyr	13	13	2,610	636	160	261	342	689	667	460
9	Bhagalpur	14	14	3,080	205	113	152	244	562	819	490
10	Purnea	17	16	4,160	200	49	69	141	303	367	326
11	Santal Parganas	10	8	10,160	92	27	39	69	118	143	119
	Total	54	51	20,010	1,133	349	521	796	1,672	1,996	1,395
ORISSA DIVISION.											
12	Cuttack	13	13	5,506	1,052	294	496	526	732	794	469
13	Balasore	10	10	3,479	474	34	67	126	156	162	99
14	Angul	2	2	1,608	2	...	2	...	...	...	1
15	Puri	6	6	2,987	1,081	296	352	429	677	788	522
16	Sambalpur	23	17	1,943	173	69	86	95	136	109	97
	Total	54	48	15,523	2,732	693	1,003	1,176	1,701	1,853	1,188
CHOTA NAGPUR DIVISION.											
17	Hazaribagh	21	19	6,087	118	14	16	31	39	81	107
18	Ranchi	32	26	3,838	449	112	340	37	176	105	122
19	Palamau	10	7	3,134	192	15	17	42	29	64	24
20	Manbhum	35	22	4,642	121	...	4	7	27	54	40
21	Singhbhum	15	9	3,013	23	...	...	...	5	8	4
	Total	113	83	20,714	903	141	377	117	276	312	297
	Total for the Province	325	285	83,402	10,564	2,641	3,631	4,424	7,809	9,447	6,036

K I—contd.

Districts of Bihar and Orissa Province, during each month of the year 1923.

						6			7		8			9	10
July.	August.	September.	October.	November.	December.	Total.			Number of deaths among children.		Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Male.	Female.	Total.	Under 1 year.	One year and under 10 years.	Male.	Female.	Total.		
67	26	35	12	24	29	656	626	1,282	104	274	0·7	0·7	0·7	0·4	1
387	145	91	51	60	101	2,954	3,097	6,051	962	1,431	2·6	2·5	2·5	0·3	2
175	65	47	25	39	141	1,272	1,223	2,495	149	217	1·3	1·3	1·3	0·4	3
620	236	173	88	123	271	4,882	4,946	9,828	1,155	1,922	1·5	1·6	1·6	0·4	
236	79	14	5	21	50	1,974	1,882	3,856	188	337	1·6	1·5	1·5	0·4	4
189	69	7	8	2	4	1,397	1,230	2,627	125	166	1·3	1·2	1·2	0·2	5
120	31	23	12	9	14	1,303	1,330	2,633	794	1,380	0·9	0·9	0·9	0·1	6
68	31	8	17	40	14	851	921	1,772	24	39	0·5	0·6	0·6	0·2	7
613	210	52	42	72	82	5,525	5,363	10,888	1,131	1,922	1·0	1·0	1·0	0·2	
146	65	59	13	71	210	1,612	1,531	3,143	418	1,039	1·4	1·3	1·4	0·4	8
107	47	56	17	25	29	1,384	1,277	2,661	...	...	1·2	1·2	1·2	0·2	9
185	108	79	134	93	206	1,037	1,023	2,060	154	298	0·9	1·0	0·9	0·2	10
62	28	5	3	10	35	350	308	658	101	130	0·3	0·3	0·3	0·3	11
500	248	199	167	199	480	4,383	4,139	8,522	673	1,467	1·0	0·9	1·0	0·3	
346	277	211	233	255	437	2,535	2,535	5,070	642	1,341	2·5	2·2	2·3	0·4	12
80	62	34	36	25	37	483	435	918	17	42	1·0	0·9	0·9	0·3	13
...	...	...	...	...	...	1	2	3	...	1	0·009	0·02	0·01	0·004	14
421	335	137	115	132	268	2,120	2,352	4,472	738	1,531	4·2	4·4	4·3	0·3	15
95	37	23	13	28	28	448	368	816	138	148	1·0	0·8	0·9	0·7	16
942	711	405	397	440	770	5,587	5,692	11,279	1,535	3,063	2·2	2·1	2·1	0·4	
72	37	28	24	47	72	286	282	568	84	152	0·3	0·3	0·3	0·1	17
10	8	2	5	11	52	489	491	980	...	...	0·6	0·6	0·6	0·1	18
32	26	20	6	13	18	156	150	306	1	...	0·4	0·4	0·4	0·6	19
13	21	7	1	8	20	120	92	212	...	...	0·1	0·1	0·1	0·06	20
4	2	1	2	5	60	44	47	91	...	2	0·09	0·1	0·1	0·1	21
141	94	58	38	84	222	1,095	1,062	2,157	85	154	0·3	0·3	0·3	0·2	
2,825	1,499	887	732	918	1,825	21,472	21,202	42,674	4,579	8,523	1·1	1·1	1·1	0·3	

Annual Form No. IX.—Deaths registered from Fevers in the dist

1	2	3	4	5								
No.	District.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.							
PATNA DIVISION.												
1	Patna	19	19	2,315	2,315	1,265	1,040	1,306	1,575	1,808	1,923	1,
2	Gaya	16	16	6,058	6,058	2,332	1,845	2,533	3,365	3,444	3,795	3,
3	Shahabad	17	17	4,735	4,735	1,866	1,630	1,926	2,083	2,676	2,747	2,
	Total	52	52	13,108	13,108	5,463	4,515	5,765	7,023	7,928	8,465	8,
TIRHUT DIVISION.												
4	Saran	13	13	4,805	3,933	1,828	1,653	2,286	2,340	2,984	2,749	3,
5	Champaran	11	11	2,548	2,548	2,587	2,398	2,393	3,103	3,394	3,439	3,
6	Muzaffarpur	14	14	4,059	4,059	3,714	3,047	4,162	5,144	4,927	4,594	4,
7	Darbhanga	14	14	3,135	3,135	3,750	3,371	4,211	4,694	4,570	4,707	3,
	Total	52	52	14,047	13,675	11,879	10,469	13,952	15,881	15,785	15,489	13,
BHAGALPUR DIVISION.												
8	Monghyr	13	13	2,610	2,610	2,453	1,934	2,448	3,327	2,848	2,826	2,
9	Bhagalpur	14	14	3,080	3,080	3,160	2,175	2,875	3,008	3,426	2,872	2,
10	Purnea	17	17	4,160	4,160	4,061	2,834	3,801	3,859	3,883	3,187	2,
11	Santal Parganas	10	10	10,160	4,365	2,331	1,984	2,156	2,764	2,394	2,286	1,
	Total	54	54	20,010	13,215	12,005	8,927	11,280	12,958	12,556	11,171	9,
ORISSA DIVISION.												
12	Cuttack	13	13	5,506	5,506	3,575	2,362	2,353	2,438	2,229	1,530	1,
13	Balasore	10	10	3,479	3,479	2,268	1,502	1,350	1,318	1,139	853	1,
14	Angul	2	2	1,608	1,163	375	379	497	637	472	374	3,
15	Puri	6	6	2,987	2,987	1,022	756	818	818	717	561	6,
16	Sambalpur	23	23	1,943	1,815	754	605	713	757	758	702	8,
	Total	54	54	15,523	14,950	7,994	5,695	5,731	5,968	5,315	4,020	4,
CHOTA NAGPUR DIVISION.												
17	Hazaribagh	21	21	6,087	5,124	1,719	1,678	1,485	1,802	1,819	1,510	1,
18	Ranchi	32	32	3,838	3,833	1,958	1,769	1,849	1,993	2,514	1,964	2,
19	Palamau	10	10	3,134	3,134	1,429	1,057	1,109	1,352	1,210	1,130	1,
20	Manbhum	35	35	4,642	4,642	1,831	1,654	1,763	2,034	2,057	1,820	1,
21	Singhbhum	15	15	3,013	2,671	863	840	850	1,052	999	797	8,
	Total	113	113	20,714	19,404	7,800	6,998	7,056	8,283	8,599	7,221	7,
	Total for Province	325	325	83,402	74,352	45,141	36,514	42,884	50,113	50,183	46,366	43,

IX 1—contd.

Bihar and Orissa Province, during each month of the year 1933.

					6			7			8	1
August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
					Male.	Female.	Total.	Male.	Female.	Total.		
1,983	1,857	1,307	1,167	1,074	9,015	9,118	18,133	9·4	10·2	9·8	12·5	1
4,132	3,638	3,297	3,202	3,005	19,516	18,689	38,205	16·3	15·6	16·0	18·8	2
2,346	2,588	1,965	2,216	2,133	13,439	13,320	26,759	13·5	13·4	13·4	17·6	3
8,461	8,103	6,569	6,585	6,212	41,970	41,127	83,097	13·3	13·3	13·3	16·6	
3,247	2,441	2,356	2,322	2,117	16,053	13,885	29,938	13·1	10·9	12·0	13·3	4
3,137	2,635	2,964	3,523	3,349	19,062	16,843	35,905	17·6	15·8	16·7	17·0	5
4,238	4,244	4,799	7,302	5,240	28,023	27,414	55,437	19·4	18·3	18·9	20·4	6
4,158	4,408	5,578	6,708	4,762	28,484	26,205	54,689	18·1	16·4	17·3	18·9	7
14,780	13,728	15,697	19,855	15,468	91,622	84,247	175,969	17·2	15·5	16·4	17·6	
3,117	2,829	3,778	3,806	2,997	17,875	16,786	34,661	15·6	14·7	15·1	17·7	8
3,293	3,339	3,951	4,141	3,744	20,462	17,782	38,244	18·1	16·1	17·1	18·1	9
3,401	3,141	3,974	5,656	5,854	24,669	21,901	46,570	21·8	20·7	21·3	19·3	10
2,545	2,254	2,721	2,669	2,834	15,417	13,471	28,888	15·0	13·1	14·1	15·1	11
12,356	11,573	14,424	16,272	15,429	78,423	69,940	148,363	17·7	16·2	16·9	17·6	
2,270	2,162	3,498	3,505	3,217	14,290	16,488	30,778	13·9	14·4	14·1	13·4	12
1,549	1,441	2,465	2,272	2,183	9,459	10,022	19,481	19·7	19·6	19·7	15·5	13
447	361	359	353	396	2,437	2,545	5,042	22·9	22·4	22·6	21·2	14
968	721	1,061	1,036	923	4,769	5,315	10,084	9·5	9·9	9·7	9·1	15
801	677	763	835	878	4,439	4,604	9,043	10·3	10·2	10·3	11·8	16
6,035	5,362	8,146	8,001	7,597	35,454	38,974	74,428	13·9	14·1	14·0	13·0	
1,878	1,511	1,781	1,796	1,739	10,664	9,653	20,317	14·1	12·6	13·3	16·5	17
2,679	2,318	2,243	1,986	1,681	13,160	11,877	25,037	16·9	15·0	15·8	16·6	18
1,126	1,021	912	1,316	1,108	7,247	6,617	13,864	17·7	16·2	16·9	22·0	19
2,104	1,697	1,939	1,926	1,863	12,353	10,286	22,639	13·1	11·8	12·5	13·5	20
920	800	903	750	1,196	5,875	4,959	10,834	12·5	10·7	11·6	11·9	21
8,707	7,347	7,778	7,774	7,587	49,299	43,392	92,691	14·7	13·2	13·9	15·7	
50,339	46,113	52,614	58,487	52,293	296,768	277,780	574,548	15·8	14·7	15·2	16·5	

Annual Form No. X.—Deaths registered from Dysentery and Diarrhoea in the

1	2	3		4		5							
No.	District.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.
		Number in each district.	Number from which deaths from Dysentery and Diarrhoea were reported.	Number in each district.	Number from which deaths from Dysentery and Diarrhoea were reported.								
PATNA DIVISION.													
1	Patna	19	19	2,315	453	42	28	48	47	54	65	54	49
2	Gaya	16	11	6,058	137	11	8	10	14	18	15	18	20
3	Shahabad	17	11	4,735	23	3	3	1	1	1	2	15	5
	Total	52	41	13,108	613	56	39	59	62	73	82	87	74
TIRHUT DIVISION.													
4	Saran	13	12	4,305	358	19	29	16	50	43	31	25	36
5	Champanan	11	3	2,543	3	...	...	...	1	1	3	1	6
6	Muzaffarpur	14	10	4,059	89	7	4	6	10	14	4	2	6
7	Darbhanga	14	11	3,135	30	11	6	27	6	26	17	10	11
	Total	52	36	14,047	480	37	39	49	67	84	55	38	59
BHAGALPUR DIVISION.													
8	Monghyr	13	11	2,610	100	3	2	7	6	1	5	5	27
9	Bhagalpur	14	12	3,080	32	2	5	3	15	9	1	11	4
10	Purnea	17	10	4,160	40	1	6	10	11	3	1	1	1
11	Santal Parganas	10	7	10,160	9	2	3	9	3	7	10	8	26
	Total	54	40	20,010	181	8	16	29	35	20	17	25	58
ORISSA DIVISION.													
12	Cuttack	13	13	5,506	2,713	836	614	711	650	656	476	561	819
13	Balasore	10	10	3,479	318	64	29	33	33	33	27	46	46
14	Angul	2	2	1,608	27	7	4	4	3	3	1	3	4
15	Puri	6	6	2,987	1,714	337	311	287	246	302	264	353	393
16	Sambalpur	23	23	1,943	729	78	87	87	93	109	137	184	144
	Total	54	54	15,523	5,501	1,322	1,045	1,122	1,025	1,103	905	1,147	1,406
CHOTA NAGPUR DIVISION.													
17	Hazaribagh	21	12	6,087	25	6	2	3	6	1	11	1	1
18	Ranchi	32	30	3,838	377	36	25	30	46	36	34	83	92
19	Palamau	10	4	3,134	19	1	1	4	1	...	1	1	2
20	Manbhum	35	10	4,642	50	6	1	1	6	4	3	3	7
21	Singhbhum	15	7	3,013	12	1	2	2	1	...	1	2	...
	Total	113	63	20,714	483	50	31	40	60	41	50	90	102
	Total for the Province	325	234	83,402	7,558	1,473	1,170	1,299	1,249	1,321	1,109	1,387	1,699

X I—*contd.**districts of Bihar and Orissa Province, during each month of the year 1933.*

				6			7			8	1
September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
				Male.	Female.	Total.	Male.	Female.	Total.		
47	61	57	39	326	265	591	0·3	0·3	0·3	0·6	1
11	8	9	11	80	73	153	0·07	0·06	0·06	0·1	2
1	2	1	6	20	21	41	0·02	0·02	0·2	0·03	3
59	71	67	56	426	359	785	0·1	0·1	0·1	0·2	
30	24	23	25	192	159	351	0·1	0·1	0·1	0·3	4
2	...	...	...	9	5	14	0·008	0·004	0·006	0·007	5
15	5	8	16	53	44	97	0·04	0·03	0·03	0·08	6
20	15	9	13	99	72	171	0·06	0·04	0·05	0·06	7
67	44	40	54	353	280	633	0·07	0·05	0·06	0·1	
10	5	18	11	45	55	100	0·04	0·05	0·04	0·07	8
5	1	12	4	46	26	72	0·04	0·02	0·03	0·05	9
1	1	2	2	22	18	40	0·02	0·02	0·02	0·03	10
11	12	1	15	56	51	107	0·05	0·05	0·05	0·1	11
27	19	33	32	169	150	319	0·04	0·03	0·04	0·06	
752	1,055	968	781	4,561	4,318	8,879	4·4	3·8	4·1	3·9	12
34	53	39	69	285	221	506	0·6	0·4	0·5	0·5	13
4	...	7	2	28	14	42	0·2	0·1	0·2	0·3	14
321	382	338	343	1,969	1,908	3,877	3·9	3·5	3·7	3·7	15
133	110	88	105	716	639	1,355	1·7	1·4	1·5	2·0	16
1,244	1,600	1,440	1,300	7,559	7,100	14,659	3·0	2·6	2·8	2·8	
...	3	5	3	30	12	42	0·04	0·01	0·02	0·06	17
67	38	28	11	319	207	526	0·4	0·3	0·3	0·4	18
...	3	3	...	9	8	17	0·02	0·02	0·02	0·04	19
7	5	10	8	27	34	61	0·03	0·04	0·03	0·04	20
5	2	1	5	14	8	22	0·03	0·02	0·02	0·04	21
79	51	47	27	399	269	668	0·1	0·08	0·1	0·1	
1,476	1,785	1,627	1,469	8,906	8,158	17,064	0·5	0·4	0·4	0·5	

Annual Form No. XI.—Deaths registered from Respiratory diseases in

1	2	3	4	5								
No.	District.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.
		Number in each district.	Number from which deaths from Respiratory diseases were reported.	Number in each district.	Number from which deaths from Respiratory diseases were reported.							
PATNA DIVISION.												
1	Patna	19	19	2,315	422	97	93	129	90	94	85	
2	Gaya	16	11	6,058	127	18	17	21	18	11	11	
3	Shahabad	17	11	4,735	11	4	2	8	3	28	2	
	Total ...	52	41	13,108	560	119	112	158	111	133	98	
TIRHUT DIVISION.												
4	Saran	13	13	4,305	193	54	60	79	88	67	53	
5	Champanan	11	5	2,548	5	...	...	1	...	...	3	
6	Muzaffarpur	14	12	4,059	66	16	24	8	19	9	5	
7	Darbhanga	14	8	3,135	8	7	7	3	4	3	4	
	Total ...	52	38	14,047	272	77	91	91	111	79	65	
BHAGALPUR DIVISION.												
8	Monghyr	13	8	2,610	36	4	3	6	5	7	6	
9	Bhagalpur	14	8	3,080	22	3	4	15	5	6	9	
10	Purnea	17	9	4,160	9	...	1	4	3	...	...
11	Santal Parganas	10	8	10,160	205	22	28	25	23	15	20	
	Total ...	54	33	20,010	272	29	36	50	36	28	35	
ORISSA DIVISION.												
12	Cuttack	13	13	5,506	887	112	88	85	111	109	77	
13	Balasore	10	9	3,479	70	9	10	10	6	4	3	
14	Angul	2	2	1,608	2	1	1	1	...	...	2	...
15	Puri	6	6	2,987	691	124	93	91	93	101	74	1
16	Sambalpur	23	23	1,9 3	600	83	73	81	82	95	100	1
	Total ...	54	53	15,523	2,250	339	265	268	292	309	256	3
CHOTA NAGPUR DIVISION.												
17	Hazaribagh	21	15	6,087	40	8	8	9	1	14	5	
18	Ranchi	32	21	3,838	21	2	2	5	3	7	1	
19	Palamau	10	5	3,134	5	3	...	...	...	...	1	
20	Manbhum	35	19	4,642	19	5	14	10	9	11	4	
21	Singhbhum	15	8	3,013	8	2	1	1	2	4	2	
	Total ...	113	68	20,714	93	20	25	25	15	36	13	3
	Total for the Province ...	325	233	83,402	3,447	584	529	592	565	585	467	51

IX I—contd.

istricts of Bihar and Orissa Province, during each month of the year 1933.

					6			7			8	1
August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
					Male.	Female.	Total.	Male.	Female.	Total.		
61	70	56	78	70	474	506	980	0·5	0·5	0·5	0·6	1
11	3	8	7	21	105	49	154	0·09	0·04	0·06	0·05	2
4	2	2	1	5	41	38	79	0·04	0·04	0·04	0·02	3
76	75	66	86	96	620	593	1,213	0·2	0·2	0·2	0·2	
52	45	43	48	62	394	317	711	0·3	0·2	0·3	0·3	4
1	2	...	2	...	4	6	10	0·003	0·005	0·004	0·006	5
6	6	4	4	3	62	49	111	0·04	0·03	0·04	0·04	6
3	3	1	7	4	35	14	49	0·02	0·008	0·01	0·01	7
62	56	48	61	69	495	386	881	0·09	0·07	0·08	0·08	
8	1	4	8	9	33	31	64	0·03	0·03	0·03	0·03	8
1	5	2	7	4	43	21	64	0·03	0·01	0·02	0·03	9
1	1	...	3	1	11	4	15	0·009	0·004	0·007	0·01	10
18	17	28	13	22	185	63	248	0·2	0·06	0·1	0·1	11
28	24	34	31	36	272	119	391	0·06	0·03	0·04	0·04	
88	76	131	110	93	658	508	1,166	0·6	0·4	0·5	0·5	12
6	6	8	4	1	48	23	71	0·09	0·04	0·07	0·06	13
1	...	2	1	2	8	3	11	0·07	0·03	0·05	0·08	14
124	75	101	115	118	619	614	1,233	1·2	1·1	1·2	1·2	15
95	69	97	91	93	654	467	1,061	1·5	0·9	1·2	1·2	16
314	226	339	321	307	1,987	1,555	3,542	0·8	0·6	0·7	0·7	
7	3	6	5	6	52	28	80	0·1	0·03	0·05	0·02	17
3	5	3	4	5	35	10	45	0·04	0·01	0·03	0·05	18
2	...	2	...	...	5	5	10	0·01	0·01	0·01	0·007	19
3	7	8	8	16	76	33	109	0·08	0·03	0·06	0·05	20
4	3	1	2	1	15	9	24	0·03	0·02	0·02	0·02	21
19	18	20	19	28	183	85	268	0·05	0·02	0·04	0·03	
499	399	507	518	536	3,557	2,738	6,295	0·2	0·1	0·2	0·2	

Annual Form No. XII.—Deaths registered from Plague in the

1	2	3		4		5							
No.	District.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	
		Number in each district.	Number from which deaths from Plague were reported.	Number in each district.	Number from which deaths from Plague were reported.								
PATNA DIVISION.													
1	Patna	19	...	2,315	...	...	...	...	...	...	...	...
2	Gaya	16	...	6,058	...	...	...	...	...	...	...	...
3	Shahabad	17	2	4,735	2	...	...	...	...	3	...	...
	Total	52	2	13,108	2	...	...	...	...	3	...	...
TIRHUT DIVISION.													
4	Saran	13	6	4,305	47	27	47	119	35	6	2	4	
5	Champanan	11	1	2,548	1	...	...	9	...	...	...	...
6	Muzaffarpur	14	7	4,059	116	103	151	193	61	16	3	2	
7	Darbhanga	14	4	3,135	150	92	96	141	50	3	...	...
	Total	52	18	14,047	314	222	294	462	146	25	5	6	
BHAGALPUR DIVISION.													
8	Monghyr	13	3	2,610	21	10	21	50	1	...	...	...
9	Bhagalpur	14	...	3,080	...	...	...	...	...	...	...	...
10	Purnea	17	...	4,160	...	...	...	...	...	...	...	...
11	Santal Parganas	10	...	10,160	...	...	...	...	...	...	...	...
	Total	54	3	20,010	21	10	21	50	1	...	...	...
ORISSA DIVISION.													
12	Cuttack	13	...	5,506	...	...	...	...	...	...	...	...
13	Balasore	10	...	3,479	...	...	...	...	...	...	...	...
14	Angul	2	...	1,608	...	...	...	...	...	...	...	...
15	Puri	6	...	2,987	...	...	...	...	...	...	...	...
16	Sambalpur	23	...	1,943	...	...	...	...	...	...	...	...
	Total	54	...	15,523	...	...	...	...	...	...	...	...
CHOTA NAGPUR DIVISION.													
17	Hazaribagh	21	...	6,087	...	...	...	...	...	...	...	...
18	Ranchi	32	...	3,838	...	...	...	...	...	...	...	...
19	Palamau	10	...	3,134	...	...	...	...	...	...	...	...
20	Manbhum	35	...	4,642	...	...	...	...	...	...	...	...
21	Singhbhum	15	...	3,013	...	...	...	...	...	...	...	...
	Total	113	...	20,714	...	...	...	...	...	...	...	...
	Total for the Province	325	23	83,402	337	232	315	512	147	28	5	6	

IX I—concl'd.

Districts of Bihar and Orissa Province, during each month of the year 1933.

					6			7			8	1
August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
					Male.	Female.	Total.	Male.	Female.	Total.		
...	...	...	...	...	...	...	...	...	...	...	0.02	1
...	...	...	...	...	...	...	...	...	...	...	0.03	2
...	1	...	...	...	2	2	4	0.002	0.002	0.002	0.01	3
...	1	...	...	...	2	2	4	0.0007	0.0007	0.0007	0.02	
...	2	6	33	89	151	219	370	0.1	0.2	0.1	0.5	4
...	...	...	..	...	4	5	9	0.003	0.004	0.004	0.01	5
1	1	5	40	40	220	396	616	0.2	0.3	0.2	0.6	6
...	8	2	25	111	204	324	528	0.1	0.2	0.2	0.6	7
1	11	13	98	240	579	944	1,523	0.1	0.2	0.1	0.4	
...	10	...	1	15	46	62	108	0.04	0.05	0.05	0.4	8
...	...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	10
...	...	...	...	...	...	...	...	...	...	...	...	11
...	10	..	1	15	46	62	108	0.01	0.01	0.01	0.1	
...	...	...	...	...	...	...	...	...	...	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	13
...	...	...	...	...	...	...	...	...	...	...	...	14
...	...	...	...	...	...	...	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	16
...	
...	
...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	21
...	
1	22	13	99	255	627	1,008	1,635	0.03	0.05	0.04	0.1	

APPENDIX II.
PROVINCIAL.

Statement showing details of registration in areas in which it is compulsory.

Compulsory registration area.	Population according to Census of 1931.	Probable number of births at the rate of 286 per 1,000 married women between the ages of 15 and 40.	Actual number of births registered during the year.	Probable birth-rate per mille (columns 2 and 3).	Registered birth-rate per mille during the year.	Number of deaths registered during the year.		Death-rate per mille.		Number of persons prosecuted under Act IV (B. C.) of 1873.	Number of persons convicted.
						Including deaths in dispensary.	Excluding deaths in dispensary.	Including deaths in dispensary.	Excluding deaths in dispensary.		
1	2	3	4	5	6	7	8	9	10	11	12
1. Patna City ...	159,690	Not available.	2,862	Not available.	18.0	2,432	1,849	15.2	11.6	...	...
2. Bihar ...	46,994		767		16.3	329	319	7.0	6.8	11	...
3. Dinapore Nizamat ...	24,221		544		22.5	253	253	10.4	10.4	...	...
4. Barh ...	9,750		139		14.2	77	52	7.9	5.3	...	...
5. Khagol ...	7,412		142		19.2	71	65	9.6	8.8	...	...
6. Gaya ...	88,005		2,274		25.8	3,748	3,530	42.6	40.1	...	...
7. Tikari ...	5,481		219		39.9	88	82	16.1	15.0	...	...
8. Daudnagar ...	11,699		493		42.1	228	222	19.5	19.0	...	...
9. Arrah ...	48,922		536		10.9	181	99	3.7	2.0	...	...
10. Buxar ...	13,449		372		27.6	105	75	7.8	5.6	3	...
11. Dumraon ...	14,421		400		27.7	53	23	3.7	1.6	...	...
12. Jagdispur ...	9,861		249		25.7	86	83	8.9	8.6	...	...
13. Sasaram ...	25,175		581		23.0	203	187	8.0	7.4	1	...
14. Bhabua ...	6,002		188		31.3	55	34	4.1	5.7	...	...
15. Chapra ...	47,448		970		20.4	776	663	16.3	14.0	...	...
16. Revelganj ...	8,812		417		47.3	239	239	27.1	27.1	...	...
17. Siwan ...	14,215		559		39.3	195	152	13.7	10.7	...	...
18. Bettiah ...	27,941		669		23.9	232	87	87.3	3.1	19	...
19. Motihari ...	17,545		384		21.9	247	178	14.1	10.1	25	...
20. Muzaffarpur ...	43,049		1,261		29.3	614	528	14.3	12.3	7	...
21. Sitamarhi ...	10,701		454		42.4	278	246	26.0	23.0	1	...
22. Hajipur ...	19,299		733		37.9	360	324	18.6	16.8	3	...
23. Lalganj ...	9,192		339		36.9	204	204	22.2	22.2	...	...
24. Darbhanga ...	60,676		2,219		36.6	1,365	1,160	22.5	19.1	...	...
25. Roserah ...	8,869		265		39.8	113	111	12.7	12.5	...	...
26. Samastipur ...	9,891		268		27.1	124	98	12.5	9.9	...	...
27. Madhubani ...	18,789		718		38.2	223	201	11.9	10.7	...	...
28. Monghyr ...	52,863		1,624		30.7	678	540	12.8	10.2	18	...
29. Jamalpur ...	30,346		1,097		36.1	453	434	15.0	14.3	3	...
30. Bhagalpur ...	83,847		1,740		20.7	1,192	1,085	14.2	12.9	...	...
31. Colgong ...	5,233		180		34.4	96	96	18.3	18.3	...	...
32. Purnea ...	15,474		240		15.5	156	24	10.1	1.5	...	...
33. Kishanganj ...	8,946		134		15.0	73	40	8.2	4.5	...	...
34. Katihar ...	15,864		151		9.5	90	61	5.7	3.8	...	...
35. Forbesganj ...	5,939		174		29.3	66	66	11.1	11.1	...	...
36. Sahibganj ...	15,883		121		7.6	42	33	2.6	2.1	...	...
37. Deoghar ...	14,217		152		10.6	50	27	3.5	1.9	...	...
38. Dumka ...	9,471		136		14.3	38	...	4.0	...	...	...
39. Madhupur ...	8,965		57		6.3	17	6	1.9	0.7	...	...
40. Cuttack ...	65,263		959		14.7	707	425	10.8	6.5	...	...
41. Kendrapara ...	12,620		361		28.6	361	350	28.6	27.7	...	...
42. Jajpur ...	10,673		262		24.5	229	210	21.5	19.7	...	...
43. Balasore ...	17,843		391		21.9	460	391	25.8	21.9	...	...
44. Puri ...	37,568		775		20.6	1,225	1,035	32.6	27.5	...	...
45. Sambalpur ...	15,017		465		30.9	289	65	19.2	4.3	...	...
46. Hazaribagh ...	20,977		524		24.9	174	103	8.3	4.9	...	...
47. Chatra ...	8,758		186		21.2	62	51	7.1	5.8	...	...
48. Giridih ...	21,122		262		12.4	84	53	3.9	2.5	3	...
49. Ranchi ...	50,517		576		11.4	356	189	7.4	3.7	8	...
50. Lohardaga ...	7,577		576		76.0	86	83	11.3	10.9	...	...
51. Daltonganj ...	12,040		193		16.0	73	35	6.1	2.9	...	...
52. Purulia ...	25,974		488		18.7	206	64	7.9	2.5	3	...
53. Raghunathpur ...	7,139		220		30.8	125	125	17.5	17.5	...	...
54. Jhaldah ...	6,924		205		29.6	111	111	16.0	16.0	1	...
55. Dhanbad ...	16,356		251		15.3	178	93	10.9	5.7	...	...
56. Chaibassa ...	10,785		380		35.2	160	136	14.8	12.6	14	...
57. Chakradharpur ...	11,191		178		33.9	106	101	9.5	9.0	4	...
58. Jugsalai ...	8,721		247		28.3	48	48	5.5	5.5	4	...
59. Jamshedpur ...	83,788		417		4.9	332	287	3.9	3.4	...	...
(a) Total	1,455,160		32,764		22.0	21,192	17,431	14.3	11.7	128	6

(a) Excluding cantonment population.

APPENDIX III.

JHARIA MINING AREA.

STATISTICS OF EPIDEMIC DISEASES.

1933.

Month.	Total births.	Total deaths.	Influenza.		Cholera.		Small-pox.		Plague.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	2	3	4	5	6	7	8	9	10	11
January ...	98	75	53	...	4	...	23	1	...	...
February ...	133	92	207	3	...	...	51	2	...	...
March ...	147	101	593	4	...	...	87	7	...	...
April ...	146	64	218	2	1	...	109	1	...	...
May ...	128	81	103	2	2	...	46	...	...	...
June ...	153	81	83	...	3	2	13	1	...	...
July ...	174	81	575	1	5	1	11	2	...	...
August ...	179	93	1,066	5	9	2	4	...	...	...
September ...	175	98	779	8	3	1	3	...	...	...
October ...	198	79	440	3	5	1	5	1	...	...
November ...	162	63	107	2	3	...	6	...	...	...
December ...	171	89	70	...	1	...	16	...	...	...
Total ...	1,864	1,016	4,292	29	38	7	394	15	...	...
	14.8	8.1	34.1	0.2	0.3	0.06	3.0	0.1	...	...

N. B. —The figures relate to the labour population only and the ratios are calculated accordingly.

APPENDIX IV.

A summary of the activities of the Public Health Circle, Public Works Department, relating to the sanitary improvements of the urban and rural areas in Bihar and Orissa during the year 1933.

Projects.—The following forecasts of cost have been prepared and submitted to the local authorities concerned :—

	Rs.
1. Monghyr Waterworks	80,000
2. Patna-Bankipur Water-Supply from the 9" tube well, Gulzarbagh	21,712

Schemes of more than Rs. 5,000 in value submitted during the year under review are :—

1. Kadam Kuan outfall drain, Patna	12,300
---	--------

1. *Construction—Bhagalpur Waterworks.*—Electrically driven filtered water pumping plant has been installed and handed over to the municipality. Tenders for the work in connection with the distribution system, Paterson filters and for the service reservoir at Tarbana were received and were under consideration.

2. *Gaya Waterworks.*—The second gravel well has been successfully completed and when tested the yield was found to be considerably more than the guaranteed yield of 12,000 gallons per hour with depression of less than 12 feet. Both the gravel wells for this waterworks have now been completed and form a valuable addition to the existing sources of supply.

3. *Jharia Drainage.*—The new works for the southern outfall are nearing completion but progress on the completion of the sewer for the main outfall has not been satisfactory due to delay in negotiating with the Railway Company for permission to lay the sewer under the railway tract.

4. *Muzaffarpur Waterworks.*—The reconstruction of the service reservoir at Kachiserai has been completed and work will shortly be started on the reconstruction of the remaining two reservoirs at Chandwara and Prince of Wales Garden. Work on the rearrangements of the distribution system is nearly completed.

5. *Patna-Bankipur Waterworks.*—Two of the new tube wells at Khajekalan have been completed and one has been tested and found satisfactory. Arrangements are in hand to test the second one and boring for the third is in progress. The rate of progress on this work has not been as good as anticipated owing to trouble experienced by the contractor for the tube wells and consequently the placing of contracts for the remainder of the work has been held up.

The rearrangement of the distribution system in the Kadam Kuan area has been completed.

6. *Patna Drainage.*—The first instalment estimated to cost Rs. 9,17,000 of the Patna Main Drainage Scheme has been sanctioned by Government and a special Engineer has been appointed and joined his duty at the end of the year.

7. *Puri Waterworks.*—Tenders have now been received for the whole of work remaining to be carried out in connection with the Puri Waterworks scheme and contracts have been completed for the distribution system, rising main and service reservoir. A large proportion of the pipes required for the rising main have been delivered at site. The work on the service reservoir and on the distribution system has been delayed owing to opposition to the acquisition of the site for the service reservoir.

8. Small tube wells have been successfully completed at Hajipur, Kasba Union Board, Sitamarhi, Sassaram, Kissengunj and Bihar.

9. Arrangements were made for temporary supply of water to the following melas :—

- (1) Bihta, (2) Bargaon, (3) Phulwari, (4) Sonapur, (5) Rathjatra (Puri) and (6) Aungari.

10. The municipalities of Arrah, Bhagalpur, Gaya, Monghyr and Muzaffarpur were assisted in the maintenance of the public water-supplies and all the installations were maintained in fair order. No serious interruption in any supply occurred during the year.

11. Patna-Bankipur Water-Supply was maintained on behalf of the Joint Waterworks Committee and a satisfactory supply of water of a high standard of bacteriological purity given throughout the year.

APPENDIX V.

DIX V.

of Bihar and Orissa Province during the year 1933.

Urban areas.										
Municipalities.	Medical officers of Health.				Sanitary and Health inspectors.	Vaccinators.		Inspector of vaccination.	School Medical Officers.	Other Health staff.
	Holding D. P. H.		Licentiates (L. P. H. S.)			Male.	Female.			
	Whole time.	Part time.	Whole time.	Part time.						
12	13	14	15	16	17	18	19	20	21	22
Patna City	1	4	7	...	}	1	...
Patna Administration Committee	...	1	...	...	3	1	...	
Bihar	1	1	...			
Dinapur Nizamat	1	1	...			
Dinapur Cantonment	Senior medical officer, R. A. M. C. one.	...	...	...	1	1	...
Barh	1	1	...	}
Khagole	1	1	...			
Gaya	1	3	2	...	}
Takari	1	...			
Daudnagar	1	...	}	...	1
Arrah	2	2	...			
Buxar	1	1	...	}	1	...
Dumraon	1	1	...			
Jagdishpur	1			
Sasaram	1	1	...			
Bhabua	1	1	...			
...	}	...	2
Chapra	1	3	...			
Revelganj	1	...			
Siwan	1	...	}	1	...
Bettiah	1	1	...			
Motihari	1	1	...			
Muzaffarpur	2	4	1	}	1	...
Sitamarhi	1	1	...			
Hajipur	1	1	...			
Lalganj	1	...			
Darbhanga	1	...	...	...	2	2	...
Roserah	1	1	...	}	1	...
Samstipur	1	1	...			
Madhubani	1	1	...			
...	2	...

DIX V.

of Bihar and Orissa Province during the year 1933—concl'd.

Urban areas.											
Municipalities.	Medical officers of Health.				Sanitary and Health Inspectors.	Vaccinators.		Inspector of Vaccination.	School Medical Officers.	Other Health staffs.	
	Holding D. P. H.		Licentiates (L. P. H. S.)			Male.	Female.				
	Whole time.	Part time.	Whole time.	Part time.							
12	13	14	15	16	17	18	19	20	21	22	
{ Monghyr	2	2	...	}	1	...	...
{ Jamalpur
{ Bhagalpur	4	3	...	}	1	...	...
{ Colgong
{ Purreea	1	1	...	}	1	...	...
{ Kishanganj	1	1	...				
{ Katihar	1	1	...	}	1	...	...
{ Forbesganj	1	...				
{ Sabeaganj	1	1	...	}	1	...	...
{ Deoghar	1	1	...				
{ Dumka	1	...	}	1	...	...
{ Madhupur	1	1	...				
...	2	...	...
{ Cuttack	1	4	...	}	1	...	2
{ Kendrapara	1	1	...				
{ Jajpur	1	...	}	1	...	...
Balasore	1	1	...				
Puri	2	1	...	1	...	...	...
Sambalpur	1	1	...	1	...	...	...
...	2	...	...
{ Hazaribagh	1	1	...	}	1	...	...
{ Chatra	1	1	...				
{ Giridih	1	1	...	}	1	...	...
{ Ranchi	2	2	...				
{ Lohardaga	1	...	}	1	...	...
Daltonganj	1	1	...				
{ Purulia	1	1	...	}	1	...	...
{ Raghunathpur	1	1	...				
{ Jhalda	1	1	...	}	1	...	...
{ Dhanbad	1	1	...				
{ Chaibassa	1	1	...	}	1	...	...
{ Chakradharpur	1	...				
{ Jugsalai	1	1	...	}	...	2	1
...				

APPENDIX VI.

Table showing maternity and child welfare centres, health visitors and trained midwives in rural and urban areas in Bihar and Orissa during 1933.

District.	Maternity and child welfare.												Remarks.
	Centres maintained by—						Trained visitors.	Trained midwives.	Trained dais.				
	Government.		Local and munici- pal bodies.		Other agencies.								
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Patna	6(a)	...	1(a)	...	3	...	4(b)	...	7	...	3	(a) Midwife r y circles. (b) Incl uding one Maternity Super v isor entertained by Government.
Muzaffarpur	1	...	1	...	...	...	1	
Darbhanga	1(a)	...	...	...	...	...	1	...	...
Monghyr	1	...	1	...	...	...	1	
Cuttack	1	...	1(b)	...	5	...	...
Balasore	1	...	...	...	1	...	...
Puri	1(a)	...	...	...	...	...	1	...	...
Sambalpur	1(a)	...	...	...	...	...	1	...	...
Manbhum	1(a)	4	...	...	...	4	2	...	...
Total	6	...	5	4	7	...	7	4	18	...	5	

STATEMENT No. 1.

STATEMENT NO. I.—Showing particulars of Vaccination in the

Number.	District.		Population of district according to the census of 1931.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary
						Male.	Female.	Total.		
1	2		3	4	5	6			7	8
Patna Division.										
1	Patna	By paid Vaccinators ... By licensed Vaccinators ...	1,846,474	893	{ 45 69	17,464 26,194	7,837 22,865	24,801 49,059	551 711	7,097 47,583
2	Gaya	By paid Vaccinators ... By licensed Vaccinators ...	2,388,462	506	{ 20 92	18,151 42,178	11,699 29,897	29,850 72,075	1,492 783	1,908 61,769
3	Shahabad	By paid Vaccinators ... By licensed Vaccinators ...	1,993,489	456	{ 19 110	10,409 22,104	5,361 17,815	15,770 39,919	830 363	7,568 38,165
Total of Patna Division		By paid Vaccinators ... By licensed Vaccinators ...	6,228,425	559	{ 84 271	46,024 90,476	24,397 70,577	70,421 161,053	838 594	16,573 147,517
Tirhut Division.										
4	Saran	By paid Vaccinators ... By licensed Vaccinators ...	2,486,468	927	{ 36 87	50,380 35,012	27,623 32,221	78,003 67,233	2,167 773	15,707 64,841
5	Champaran	By paid Vaccinators ... By licensed Vaccinators ...	3,145,687	607	{ 17 78	49,646 24,323	19,680 20,886	69,326 45,309	4,078 579	8,218 41,307
6	Muzaffarpur	By paid Vaccinators ... By licensed Vaccinators ...	2,941,025	968	{ 20 79	65,550 67,116	33,696 53,941	99,246 121,057	4,962 1,532	4,969 84,494
7	Darbhanga	By paid Vaccinators ... By licensed Vaccinators ...	3,166,094	945	{ 15 88	23,830 51,218	12,676 46,144	36,506 97,862	2,434 1,106	2,974 89,644
Total of Tirhut Division		By paid Vaccinators ... By licensed Vaccinators ...	10,739,274	852	{ 88 332	189,406 177,669	93,675 153,192	283,081 330,661	3,217 996	31,868 230,186
Bhagalpur Division.										
8	Monghyr	By paid Vaccinators ... By licensed Vaccinators ...	2,287,154	582	{ 16 61	35,075 37,226	14,381 32,669	49,456 69,886	3,091 1,146	37,621 57,109
9	Bhagalpur	By paid Vaccinators ... By licensed Vaccinators ...	2,234,632	528	{ 19 64	48,996 37,132	26,893 31,623	75,889 68,755	3,994 1,074	5,396 63,479
10	Purnea	By paid Vaccinators ... By licensed Vaccinators ...	2,186,543	439	{ 14 59	24,292 51,453	11,203 37,201	35,495 88,654	2,535 1,502	4,990 63,095
11	Santal Parganas	By paid Vaccinators ... By licensed Vaccinators ...	2,051,472	375	{ 10 55	7,781 28,627	5,358 26,408	13,139 55,035	1,314 1,001	6,376 52,062
Total of Bhagalpur Division.		By paid Vaccinators ... By licensed Vaccinators ...	8,759,801	471	{ 59 239	116,144 154,438	57,835 127,892	173,979 282,330	2,949 1,181	20,524 235,745
Orissa Division.										
12	Cuttack	By paid Vaccinators ... By licensed Vaccinators ...	2,176,707	595	{ 16 73	36,676 23,781	13,380 19,621	50,056 43,402	3,128 594	4,245 41,007
13	Balasore	By paid Vaccinators ... By licensed Vaccinators ...	990,600	482	{ 12 38	18,498 21,619	7,642 15,342	26,140 36,961	2,178 973	1,368 22,737
14	Angul	By licensed Vaccinators ...	222,736	132	13	8,470	6,414	14,884	1,145	7,470
15	Pruri	By paid Vaccinators ...	1,035,154	415	29	59,667	30,577	99,544	7,119	50,530
16	Sambalpur	By paid Vaccinators ... By licensed Vaccinators ...	880,945	230	{ 4 34	6,697 10,854	3,821 9,946	10,513 20,800	2,629 612	972 19,049
Total of Orissa Division		By paid Vaccinators ... By licensed Vaccinators ...	5,306,142	387	{ 61 158	121,838 64,724	55,420 51,323	177,258 116,047	2,906 734	57,115 90,263

stricts of Bihar and Orissa during the year 1933-34.

Vaccination.				Re-vaccination.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
Successful.				Total.	Successful.	Unknown.	Primary.	Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.
Under one year.	One year and under six years.	Total of all ages.	Unknown.												
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1,539	4,384	6,489	222	17,704	8,956	4,358	94.60	17.33	35.65	3.35	24.62	52,417	28.39	814	0.44
8,380	37,211	47,573	1	1,476	589	5.5	90.98	60.66		0.002	34.21				
1,416	402	1,876	6	27,942	19,057	4,875	98.63	82.63	37.20	0.31	17.45	70,386	29.47	1,156	0.48
9,485	47,071	60,014	1,276	10,346	7,253	1,037	90.21	78.56		2.06	10.06				
2,596	3,688	7,511	29	8,203	4,558	858	99.64	92.06	26.07	0.38	10.46	48,081	25.12	1,107	0.55
9,107	22,513	38,144	14	1,754	884	284	99.99	60.13		0.04	16.19				
5,551	7,574	15,876	273	53,848	32,601	10,091	97.40	74.50	25.05	1.65	18.74	170,884	37.44	3,077	0.49
26,981	106,795	145,731	1,291	13,536	8,755	1,826	99.66	74.76		0.88	13.49				
3,036	7,788	15,625	30	62,296	36,871	11,296	99.67	72.30	47.90	0.19	18.13	88,207	35.47	780	0.31
18,427	40,941	64,585	122	2,392	1,317	423	99.70	66.88		0.19	17.96				
864	3,251	5,504	2,348	61,108	18,448	33,500	93.73	66.97	31.13	28.57	54.92	47,448	22.11	272	0.12
6,875	31,676	40,080	366	4,002	1,826	1,109	98.13	63.11		6.88	27.71				
1,065	3,718	4,576	42	94,277	37,102	31,774	98.04	59.36	49.18	0.84	33.70	98,952	33.64	614	0.21
8,299	75,806	84,103	54	36,563	17,800	6,727	99.60	59.66		0.06	18.39				
1,110	1,682	2,799	156	33,532	11,834	9,472	99.32	49.18	34.29	5.24	28.25	107,600	34.05	583	0.18
21,330	67,920	89,539	5	7,718	3,860	1,451	99.89	61.73		0.005	18.80				
6,095	16,539	28,804	2,576	251,213	164,255	86,162	98.33	63.14	40.61	8.08	34.27	342,413	31.88	2,249	0.21
54,031	215,843	278,306	547	50,675	24,812	9,710	99.52	60.57		0.10	19.16				
1,580	2,099	3,696	50	45,694	8,711	25,376	99.57	42.66	31.44	1.33	55.71	70,715	30.92	1,030	0.45
16,096	40,529	57,067	5	12,777	2,445	7,129	99.93	43.29		0.008	55.80				
1,046	2,919	5,319	19	70,493	33,880	17,691	98.02	63.22	47.24	0.35	25.11	75,858	38.95	779	0.35
25,543	37,357	63,418	2	5,276	2,213	2,135	90.91	70.45		0.003	40.46				
551	2,449	3,321	1,424	30,505	6,934	18,236	93.39	56.52	36.84	28.74	59.78	46,616	21.32	748	0.34
13,279	43,895	60,934	1,615	25,559	9,370	13,327	99.11	76.60		2.55	52.55				
3,856	3,205	6,069	229	6,763	1,760	3,879	99.22	61.02	30.22	3.59	57.36	60,153	29.32	856	0.42
26,171	25,188	51,651	314	2,973	1,215	646	99.81	52.21		0.60	21.72				
6,933	10,672	18,435	1,732	153,455	50,785	65,082	98.10	57.47	36.25	8.44	42.41	253,342	28.92	3,413	0.39
81,089	146,979	233,070	1,936	46,585	15,243	23,237	99.68	65.29		0.82	49.88				
517	1,206	1,999	2,162	45,811	1,627	42,729	95.97	52.79	20.76	50.93	93.27	47,223	21.69	922	0.42
15,286	22,083	39,191	806	2,395	1,086	804	99.23	68.66		1.96	33.57				
125	475	660	708	24,772	3,955	19,312	100.00	72.44	35.10	51.80	77.96	40,705	41.09	464	0.49
3,808	15,041	20,742	1,962	14,324	9,411	3,209	99.84	85.44		8.63	22.56				
3,984	3,416	7,427	16	7,414	5,761	790	99.64	86.97	59.21	0.21	10.65	9,145	41.06	4	0.02
7,281	32,536	48,164	1,898	40,014	10,777	21,932	99.04	59.60	57.07	3.76	54.81	43,713	42.23	175	0.17
144	32	382	590	9,546	108	9,338	100.00	60.67	24.34	60.70	98.13	22,257	25.26	471	0.13
14,507	4,374	18,084	52	1,751	1,683	34	99.83	98.02		0.27	1.94				
8,067	34,437	51,205	5,358	120,143	16,467	93,341	98.93	61.44	32.53	0.33	77.69	163,043	30.74	2,036	0.38
37,185	44,914	87,024	2,836	25,764	17,941	4,837	99.54	85.65		3.14	18.76				

STATEMENT NO. I.—Showing particulars of Vaccination in th

Number.	District.	Population of district according to the census of 1931.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary	
					Male.	Female.	Total.		Total.	
1	2	3	4	5	6			7	8	
Chota Nagpur Division.										
17	Hazaribagh ...	{ By licensed Vaccinators ... } { By paid Vaccinators ... }	1,517,357	216	{ 16 44	10,179 24,870	3,945 23,274	14,124 48,144	683 1,004	2,931 44,014
18	Ranchi ...	{ By paid Vaccinators ... } { By licensed Vaccinators ... }	1,567,149	230	{ 11 45	17,617 23,308	10,855 19,554	28,472 42,832	2,588 952	2,250 36,300
19	Palamau ...	{ By paid Vaccinators ... } { By licensed Vaccinators ... }	8 8,736	166	{ 8 26	6,773 11,549	3,315 9,608	10,088 21,127	1,261 813	2,581 19,431
20	Manbhum ...	{ By paid Vaccinators ... } { By licensed Vaccinators ... }	1,810,890	442	{ 29 41	21,329 21,302	14,593 18,867	35,925 40,259	1,239 983	18,190 35,992
21	Singhbhum ...	{ By paid Vaccinators ... } { By licensed Vaccinators ... }	929,802	239	{ 4 26	1,751 21,167	943 17,414	2,694 38,581	673 1,484	1,021 20,871
Total of Chota Nagpur Division.		{ By paid Vaccinators ... } { By licensed Vaccinators ... }	6,643,934	235	{ 68 182	57,649 1,02,256	33,654 88,717	91,303 1,90,973	1,343 1,049	26,991 156,701
Total of Vaccine Department.		{ By paid Vaccinators ... } { By licensed Vaccinators ... } { Total ... }	37,677,576	453	{ 360 1,182 1,542	531,061 589,563 1,120,624	264,981 491,701 756,682	796,042 1,081,264 1,877,306	2,211 915 1,217	153,071 910,411 1,063,491
Bails and Collieries		...	...	...	...	7,653	4,161	11,814	...	1,061
Dispensaries and Leper Asylum		...	...	...	...	328	157	485	...	281
Total Cooly Department		...	...	...	...	1,610	796	2,403	...	121
Total Jails and Cantonments		...	...	...	...	23,631	1,086	24,715	...	621
Grand Total		...	...	...	...	1,153,846	762,880	1,916,726	...	1,065,591

istricts of Bihar and Orissa during the year 1933-34—concl.

Vaccination.				Revaccination.			Percentage of success- ful cases in which the results were known.		Persons success- fully vaccinated per 1,000 of popu- lation.	Percentage of unknown cases to total cases.		Average annual num- ber of persons success- fully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
Successful.				Total.	Successful.	Unknown.	Primary.	Revaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.*
Under one year.	One year and under six years.	Total of all ages.	Unknown.												
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
943	1,488	2,676	204	11,187	3,535	5,993	97·97	68·03	38·83	6·94	53·57	49,111	32·37	366	0·24
16,931	25,497	43,910	22	4,130	1,544	2,043	99·81	74·09		0·05	49·54				
1,649	518	2,246	1	26,222	15,017	4,882	99·87	70·37	36·95	0·04	16·62	63,074	40·25	218	0·14
30,253	6,007	36,346	11	6,469	3,542	1,260	99·90	68·00		0·03	19·48				
328	1,117	2,231	320	7,503	1,230	4,991	98·50	48·93	28·68	12·30	66·52	22,979	28·07	568	0·72
10,249	7,550	19,086	258	1,695	888	501	99·54	74·37		1·33	29·56				
3,572	13,297	17,151	335	17,729	7,532	3,970	96·02	54·67	35·58	1·84	23·39	57,904	31·97	144	0·08
12,483	22,657	35,993	...	4,266	2,793	278	100·00	70·04		...	6·52				
492	394	908	111	1,665	610	656	98·91	69·45	37·41	10·78	39·40	23,000	24·74	123	0·13
13,556	6,873	20,748	68	17,705	12,516	1,541	99·71	77·43		0·33	8·70				
6,984	16,814	25,212	971	64,306	27,914	20,492	96·87	46·77	34·69	3·60	31·87	216,068	32·52	1,439	0·22
63,512	68,584	156,083	359	34,265	21,283	5,626	99·83	74·31		0·23	16·42				
33,630	86,336	139,532	10,910	642,965	232,022	275,198	98·15	63·07	33·03	7·13	42·79	1,145,750	30·41	12,214	0·32
284,098	583,115	900,214	6,969	170,845	88,034	45,236	99·64	70·08		0·76	26·48				
317,728	669,451	1,039,746	17,879	813,810	320,056	320,344	99·15	64·86		1·68	39·36				
389	542	1,006	...	10,746	5,364	118	94·19	50·47	...	...	1·10	...	...	...	...
67	163	244	38	201	60	88	99·19	58·40	...	13·38	43·78	...	...	...	...
10	...	10	112	2,284	...	2,284	100·00	...	...	91·80	100·00	...	..	...	...
263	209	600	5	24,093	12,091	3,024	97·24	57·39	...	0·80	12·55	...	...	...	...
318,457	670,365	1,041,606	18,034	851,134	337,571	325,858	99·43	64·26	36·60	1·69	38·28	...	...	...	...

SUMMARY.

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which the results were known.		Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.
	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under 6 years.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
BY SPECIAL STAFF.												Rs. a. p.	Rs. a. p.
Statement (I) ...	1,063,496	813,810	1,063,496	813,810	99.15	64.86	1,542	1,217	317,728	669,451	36.60	1,43,728 9 11	0 1 8
BY OTHER AGENCIES.													
Collieries, Dispensaries and Leper Asylum, Cooly Depot, Jails and Cantonments.	2,096	37,324	2,096	37,324	95.83	55.06	...	...	739	914			
Total ...	1,065,592	851,134	1,065,592	851,134	99.43	64.26	1,543	1,217	318,467	670,365	36.60	1,43,728 9 11	0 1 8

STATEMENT No. II.

STATEMENT NO. II.—Showing the cost of vaccination in the

No.	Circle and district.	Native supervising officer.	Pay.	Paid vaccinators.	Pay.	Licensed vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Exp.
1	2	3	4	5	6	7	8	9	10	11	12	13
PATNA DIVISION.												
1	Patna	17	Rs. a. p.	45	Rs. a. p.	69	Rs. a. p.	...	Rs. a. p.	1	Rs. a. p.	...
2	Gaya ... ..	...	...	20	1,457 0 0	92	...	1	240 0 0	2	216 0 0	...
3	Shahabad	5	2,478 0 0	19	1,543 6 3	110	...	...	...	...	...	...
	Total of Patna Division	22	2,478 0 0	84	6,033 15 0	271	...	1	240 0 0	3	336 0 0	...
TIRHUT DIVISION.												
4	Saran	4	2,174 8 0	36	2,061 0 0	87	...	...	...	...	...	...
5	Champaran	3	219 7 6	17	1,113 11 0	78	...	...	...	...	...	...
6	Muzaffarpur	4	1,464 0 0	20	5,526 2 9	79	...	...	...	...	...	...
7	Darbhanga	4	1,437 1 0	15	1,233 8 0	88	...	...	...	...	...	...
	Total of Tirhut Division	15	5,285 0 6	88	10,894 5 9	332	...	...	...	...	...	...
BHAGALPUR DIVISION.												
8	Monghyr	4	1,987 0 0	16	1,522 3 0	61	...	...	...	1	96 0 0	...
9	Bhagalpur	5	2,935 8 0	19	1,801 14 2	64	...	...	...	...	...	...
10	Purnea	10	3,148 0 0	14	4,493 0 1	59	...	...	...	...	...	...
11	Santal Parganas	7	3,179 6 0	10	2,255 4 0	55	...	...	...	...	...	...
	Total of Bhagalpur Division	26	11,249 14 0	59	10,072 5 3	239	...	...	...	1	96 0 0	...
ORISSA DIVISION.												
12	Cuttack	7	...	16	1,970 4 6	73	...	1	316 5 0	...	...	...
13	Balasore	3	...	13	952 10 2	38	...	...	...	...	...	...
14	Angul	2	1,021 14 0	...	...	13	...	...	...	...	...	...
15	Puri	11	...	29	3,314 9 0	...	...	...	...	...	...	...
16	Sambalpur	3	1,506 3 0	4	529 4 9	34	...	...	...	...	...	...
	Total of Orissa Division	26	2,527 1 0	61	6,766 12 5	158	...	1	316 5 0	...	...	...
CHOTA NAGPUR DIVISION.												
17	Hazaribagh	4	2,064 0 0	16	1,150 7 3	44	...	...	...	...	...	...
18	Ranchi	5	2,497 10 0	11	1,421 5 6	45	...	...	...	...	...	...
19	Palamanu	3	1,861 3 0	8	1,007 13 0	26	...	...	...	...	...	...
20	Manbhum	3	1,761 0 0	29	3,262 5 9	41	...	...	...	...	...	...
21	Singhbhum	3	1,467 8 0	4	470 8 9	26	...	...	...	...	...	...
	Total of Chota Nagpur Division	18	9,651 5 0	68	7,312 8 3	182	...	...	...	...	...	...
	Total of Vaccine Circle	107	31,191 4 6	360	41,619 14 8	1,182	...	2	556 5 0	4	432 0 0	...
	ESTABLISHMENT OF THE ASSISTANT DIRECTOR OF PUBLIC HEALTH, NORTH BIHAR CIRCLE.	1	8,418 9 0	...	...	...	...	2	1,217 12 0	2	235 13	...
	DITTO, SOUTH BIHAR CIRCLE	1	12,164 7 0	...	...	...	...	2	1,217 12 0	2	236 4	...
	DITTO, CHOTA NAGPUR AND ORISSA CIRCLES	1	14,142 8 0	...	...	...	...	2	1,292 12 0	2	240 0	...
	Total	3	34,725 8 0	...	...	...	...	6	3,726 4 0	6	712 1	...
	Total of Province ... ..	...	65,916 12 6	...	41,619 14 8	...	...	8	4,284 9 0	10	1,144 1	...

Province of Bihar and Orissa during the year 1933-34.

Expenditure.				Paid from—							Number of all successful vaccinations and revaccinations.	Average cost of each successful case.
Total pay of establishment.	Travelling allowance.	Contingencies.		Total cost.	Imperial Fund.	Provincial Fund.	Local Fund.	Municipalities.	Native States.	Total.		
		Cost of lymph.	Other contingencies.									
13	14	15	16	17	18	19	20	21	22	23	24	25
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.		Rs. a. p.
3,753 8 9	66 2 9	...	252 0 0	4,071 11 6	177 10 6	243 9 0	1,516 8 3	2,133 15 9	...	4,071 11 6	65,832	0 1 0
1,913 0 0	115 9 0	...	220 13 6	2,249 6 6	...	...	1,326 1 6	923 5 0	...	2,249 6 6	88,862	0 0 3
4,021 6 3	1,508 15 0	...	117 2 0	5,647 7 3	...	3,768 9 0	902 0 6	976 13 9	...	5,647 7 3	51,972	0 1 9
9,687 15 0	1,690 10 9	...	589 15 6	11,968 9 3	177 10 6	4,012 2 0	3,744 10 3	4,034 2 6	...	11,968 9 3	206,666	0 0 11
5,135 8 0	1,952 14 0	...	236 12 0	7,325 2 0	...	3,928 12 0	2,525 1 0	871 5 0	...	7,325 2 0	119,338	0 1 0
1,333 2 6	...	...	21 4 3	1,354 6 9	...	219 7 6	792 15 3	342 0 0	...	1,354 6 9	66,805	0 0 4
6,990 2 9	895 1 9	...	232 8 0	8,117 12 6	...	...	6,926 0 9	1,191 11 9	...	8,117 12 6	144,553	0 0 11
2,660 9 0	893 3 0	...	128 15 6	3,685 11 6	...	2,323 4 0	525 4 0	837 3 6	...	3,685 11 6	108,574	0 0 6
16,119 6 3	3,744 2 9	...	619 7 9	20,483 0 9	...	6,471 7 6	10,769 5 0	3,242 4 3	...	20,483 0 9	439,270	0 0 9
3,605 3 0	1,911 6 0	...	266 4 0	5,782 13 0	...	3,463 9 0	1,400 0 0	914 4 0	...	5,782 13 0	71,919	0 1 3
4,537 6 2	564 3 6	...	9 0 0	5,310 9 8	...	3,499 11 6	1,230 4 2	580 10 0	...	5,310 9 8	105,570	0 0 10
7,641 0 1	...	...	...	7,641 0 1	...	3,148 0 0	3,178 3 7	1,314 12 6	...	7,641 0 1	89,559	0 1 6
5,434 10 0	2,756 0 0	...	206 5 9	8,396 15 9	...	6,115 6 0	1,390 4 0	891 5 9	...	8,396 15 9	61,992	0 2 2
21,418 3 3	5,231 9 6	...	481 9 9	27,131 6 6	...	16,231 10 6	7,198 11 9	3,701 0 3	...	27,131 6 6	320,040	0 1 4
2,286 9 6	...	...	141 4 6	2,427 14 0	...	...	1,423 6 6	999 7 6	...	2,427 14 0	45,201	0 0 10
952 10 2	...	...	111 13 0	1,064 7 2	...	690 2 2	111 13 0	262 8 0	...	1,064 7 2	34,768	0 0 6
1,021 14 0	1,178 12 0	...	76 14 0	2,277 8 0	...	2,277 8 0	...	...	...	2,277 8 0	13,168	0 2 9
3,314 9 0	...	...	4 9 0	3,319 2 0	...	...	3,105 0 0	214 2 0	...	3,319 2 0	59,078	0 0 11
2,034 7 9	1,190 11 0	...	85 2 0	3,310 4 9	...	2,707 4 0	405 11 9	197 5 0	...	3,310 4 9	21,445	0 2 6
9,610 2 5	2,369 7 0	...	419 10 6	12,399 3 11	...	5,674 14 2	5,050 15 3	1,673 6 6	...	12,399 3 11	173,680	0 1 2
3,214 7 3	1,598 0 0	...	84 14 6	4,897 5 9	...	3,742 0 0	602 7 3	552 14 6	...	4,897 5 9	58,914	0 1 4
3,918 15 6	1,585 0 0	...	113 2 9	5,617 2 3	...	4,165 12 9	462 0 0	959 5 6	...	5,617 2 3	57,912	0 1 7
2,889 0 0	957 10 0	...	92 3 6	3,918 13 6	...	2,878 13 0	865 4 6	174 12 0	...	3,918 13 6	23,485	0 2 8
5,023 5 9	643 5 3	...	110 0 0	5,776 11 0	...	2,343 15 0	2,922 5 0	510 7 0	...	5,776 11 0	61,428	0 1 5
1,938 0 9	440 11 0	...	36 9 9	2,415 5 6	...	1,923 3 0	160 14 0	331 4 6	...	2,415 5 6	34,782	0 1 1
16,963 13 3	5,224 10 3	...	436 14 6	22,625 6 0	...	15,083 11 9	5,012 14 9	2,528 11 6	...	22,625 6 0	239,521	0 1 6
73,799 8 2	18,260 8 3	...	2,547 10 0	94,607 10 5	177 10 6	47,473 13 11	31,776 9 0	15,179 9 0	...	94,607 10 5	1,379,177	0 1 1
9,872 2 0	1,912 14 0	...	821 2 6	12,606 2 6	...	12,606 2 6	...	...	...	12,606 2 6	...	...
13,618 7 0	2,374 2 0	...	1,347 11 6	17,340 4 6	...	17,340 4 6	...	...	...	17,340 4 6	...	...
15,675 4 0	3,225 8 0	...	273 12 6	19,174 8 6	...	19,174 8 6	...	...	...	19,174 8 6	...	...
39,165 13 0	7,512 8 0	...	2,442 10 6	49,120 15 6	...	49,120 15 6	...	...	...	49,120 15 6	...	...
1,12,965 5 2	25,778 0 3	...	4,990 4 6	1,43,728 9 11	...	96,594 13 5	31,776 9 0	15,179 9 0	...	1,43,728 9 11	...	0 1 3

Comparative statement no. III—Showing the percentage of persons primarily vaccinated to the total number of vaccinations performed in the Province of Bihar and Orissa in each of the undermentioned official years.

Establishments.	Years.									
	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
1	2	3	4	5	6	7	8	9	10	11
Government staff ...	...	...	14.17	25.46	14.13	7.36	9.56	9.99	...	4.02
Dispensaries ...	...	...	...	29.76	...	14.75	9.45	75.00	14.06	58.56
Municipal ...	72.96	43.40	49.70	62.34	73.47	71.71	64.03	67.13	30.88	29.00
District Board ...	80.42	60.52	55.95	52.10	60.14	67.12	70.70	64.30	38.61	17.94
Licensed vaccinators ...	98.62	92.11	93.02	96.21	97.60	97.59	92.75	97.29	90.97	84.19
Rails and collieries ...	94.28	28.12	31.91	29.82	34.22	35.25	34.23	28.78	21.47	9.04
Jails ...	4.36	3.88	1.75	1.09	1.49	1.34	1.11	0.78	2.20	0.89
Cooly Depot ...	3.22	2.81	3.89	1.26	2.31	0.51	0.45	1.42	7.29	5.07
Cantonment ...	92.73	84.47	51.71	36.49	...	93.08	69.21	94.03	53.81	73.73

STATEMENT No. IV.

STATEMENT NO. IV.--Showing particulars of vaccination

District.	Total number of persons vaccinated.		Total number inspected—								Percentage of	
			By Assistant Directors of Public Health or Superintendent of Vaccination.				By Native Superintendents or other Inspecting Officers.				By Assistant Director Superintendent	
			Assistant Directors of Public Health.		Superintendent of vaccination.		District Inspectors. and Health Inspectors.		Sub-Inspectors.		Assistant Directors of Public Health.	
	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Patna ...	55,118	21,424	437	...	...	...	...	...	...	...	0·79	...
Gaya ...	63,713	39,516	355	...	2,684	2,451	...	...	4,532	1,265	0·56	...
Shahabad ...	45,733	12,380	3,227	...	867	87	3,856	124	11,971	1,797	7·05	..
Saran ...	80,551	66,212	...	...	1,083	...	10,489	...	25,502	...	...	...
Champaran ...	49,425	66,697	4,936	...	3,135	1,665	2,649	...	15,381	4,198	10·09	...
Muraffarpur ...	89,567	1,32,299	3,452	...	9,343	24	12,472	77	36,364	248	3·85	...
Darbhanga ...	92,633	42,654	5,818	...	1,714	213	...	...	21,797	...	6·31	...
Monghyr ...	60,871	58,471	3,011	...	127	...	4,050	...	14,570	752	4·94	...
Bhagalpur ...	68,875	78,847	2,492	...	6,447	4,510	...	...	13,199	...	3·62	...
Purnea ...	68,085	56,064	1,223	...	3,511	89	6,123	187	37,602	818	1·80	...
Santal Parganas ...	58,662	13,103	...	...	1,227	...	3,908	24	19,147	385	...	...
Cuttack ...	45,279	49,586	2,031	...	902	...	5,945	...	...	...	4·48	...
Balasore ...	24,105	38,996	1,505	...	835	520	150	120	4,630	3,130	6·24	...
Angul ...	7,470	7,707	2,426	...	1,839	1,018	3,049	1,471	1,714	839	32·47	...
Puri ...	50,530	40,813	1,668	...	1,968	566	1,372	423	10,308	4,455	3·30	...
Sambalpur ...	20,024	12,117	2,901	...	1,924	31	3,849	116	6,919	893	14·49	...
Hazaribagh ...	48,075	26,711	...	...	1,192	...	3,487	116	9,923	77	...	...
Ranchi ...	38,643	33,936	562	...	...	...	6,442	200	18,139	472	1·45	...
Palamau ...	22,139	10,975	...	...	1,700	362	3,876	83	8,334	636	...	...
Manbhum ...	54,189	23,826	3,883	...	1,815	1,838	3,950	295	19,424	15,762	7·17	...
Singhbhum ...	21,905	19,370	1,584	...	497	185	2,783	3,631	4,449	7,840	7·23	...
TOTAL ...	1,065,592	8,51,134	41,596	...	42,805	13,549	78,445	6,867	283,905	43,557	3·90	...

verified by Inspecting Officers during the year 1933-34.

Inspection to total number vaccinated.						Percentage of cases found successful to total number inspected.										Percentage of successful cases reported by vaccinators.	
By Assistant Directors of Public Health or Superintendent of Vaccination.		By Native Superintendents or other Inspecting Officers.				By Assistant Directors of Public Health or Superintendent of Vaccination.				By Native Superintendents or other Inspecting Officers.							
Superintendent of Vaccination.		District Inspectors and Health Inspectors.		Sub-Inspectors.		Assistant Directors of Public Health.		Superintendent of Vaccination.		District Inspectors and Health Inspectors.		Sub-Inspectors.					
Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.				
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
...	...	...	...	...	...	100.00	...	...	...	...	...	...	...	99.00	89.06
4.21	6.20	...	...	7.11	3.20	95.49	...	99.85	96.98	...	...	99.32	...	99.27	81.50
1.89	0.70	8.43	10.00	26.17	14.51	93.24	...	99.30	83.90	98.93	37.00	84.88	10.51	99.93	51.02		
1.35	...	13.02	...	31.67	...	...	...	99.54	...	73.49	...	88.52	...	99.58	58.18
6.34	2.50	5.34	...	31.12	6.29	96.16	...	99.04	14.53	99.88	...	97.13	57.09	97.62	68.11		
10.43	0.02	13.92	0.06	40.60	0.19	98.66	...	99.83	100.00	95.04	83.12	99.12	59.11	99.46	41.95		
1.85	0.50	...	...	23.53	...	98.50	...	100.00	44.60	...	...	99.97	...	99.69	38.57
0.21	...	6.65	...	23.93	1.19	99.57	...	100.00	...	99.43	...	99.46	36.41	99.82	19.07		
9.36	5.70	...	...	19.16	...	96.31	...	100.00	100.00	...	...	100.00	...	99.79	56.71
5.16	0.16	9.00	0.33	55.22	1.46	94.25	...	94.00	77.53	98.31	67.91	98.62	71.51	94.37	20.05		
2.09	...	6.66	0.18	32.46	2.94	...	...	99.02	...	97.51	87.50	95.76	15.02	84.70	33.55
1.99	...	13.13	...	...	...	97.24	...	96.23	...	97.51	...	...	...	99.14	63.67
3.42	1.33	0.62	0.31	19.21	8.03	97.07	...	99.39	96.15	100.00	83.33	99.57	96.49	88.65	34.27		
24.62	13.21	40.83	19.09	22.94	10.89	95.43	...	99.34	98.03	99.93	98.43	98.82	100.00	99.42	77.70		
3.89	1.39	2.71	1.04	20.40	10.91	96.82	...	99.06	46.99	94.46	74.94	96.31	56.27	99.68	44.38		
9.61	0.26	19.17	0.98	34.55	7.29	96.86	...	98.70	100.00	89.63	100.00	73.09	100.00	96.63	17.30		
2.47	...	7.25	0.43	20.64	0.29	...	...	99.41	...	99.31	49.14	97.20	54.55	99.03	42.33
...	...	16.67	0.60	46.94	1.40	98.82	...	...	...	100.00	100.00	100.00	100.00	99.00	79.84
7.68	3.30	17.51	0.76	37.64	5.79	...	...	87.77	16.57	82.97	59.04	73.23	38.83	96.33	18.75
3.35	7.71	7.28	1.24	35.84	16.15	97.81	...	99.83	53.10	99.01	80.34	51.08	26.30	100.00	6.62		
2.27	0.95	12.70	18.75	20.31	40.47	97.03	...	93.89	82.16	98.88	63.15	98.45	67.60	98.86	67.76		
4.01	1.59	7.36	0.81	26.64	5.12	97.24	...	98.59	76.48	86.17	75.49	94.53	43.92	97.61	40.54		

STATEMENT NO. I.—Showing side by side the ratios per mille of population

District.	1924-25.		1925-26.		1926-27.		1927-28.	
	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.
1	2	3	4	5	6	7	8	9
Patna ...	0·13	41·63	0·49	45·73	1·69	60·52	1·07	45·78
Gaya ...	0·01	25·34	0·46	29·72	2·21	31·69	1·21	25·92
Shahabad ...	0·10	22·24	0·16	31·15	0·99	40·83	1·60	31·64
Saran ...	0·44	32·84	0·50	34·76	0·50	32·75	0·75	36·49
Champaran ...	0·38	23·19	0·65	26·24	0·98	29·89	0·34	23·24
Muzaffarpur ...	0·21	33·22	0·24	35·23	0·36	36·37	0·56	37·26
Darbhangā ...	0·15	31·11	0·12	34·67	0·27	35·85	0·34	39·22
Monghyr ...	0·12	30·21	0·11	35·18	0·62	37·92	0·93	36·65
Bhagalpur ...	0·46	32·57	0·13	36·64	0·65	38·90	1·13	40·63
Purnea ...	0·04	21·67	0·17	24·06	0·69	25·45	0·95	25·03
Santal Parganas ...	0·06	33·82	0·17	34·66	0·90	37·47	1·06	36·28
Cuttack ...	0·77	21·96	2·50	30·39	2·92	21·99	0·95	26·65
Balasore ...	0·34	25·88	1·71	36·12	2·34	43·48	1·42	28·22
Angul ...	...	33·78	...	109·19	0·06	95·66	0·08	90·45
Puri ...	1·21	38·75	7·21	64·43	3·54	48·92	0·47	48·59
Sambalpur ...	0·12	27·21	0·60	27·71	0·68	26·31	0·27	25·21
Ha aribagh ...	0·05	28·38	0·34	34·75	1·00	35·97	0·73	38·77
Ranchi ...	0·02	36·98	0·34	43·01	1·02	45·63	0·39	43·34
Palamau ...	0·01	26·92	0·06	28·92	0·28	30·84	1·01	30·57
Manbhum ...	0·02	32·73	0·32	46·18	0·42	48·32	0·17	45·66
Singhbhum ...	0·36	29·64	0·52	33·75	0·16	29·44	0·13	28·59
Total ...	0·24	29·72	0·67	35·33	1·05	36·71	0·79	35·10

of deaths from small-pox and the ratios of successful vaccinations per mille of population during the ten years ending 1933-34.

1928-29.		1929-30.		1930-31.		1931-32.		1932-33.		1933-34.	
Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.	Ratio of deaths from small-pox.	Ratio of successful vaccination per mille of population.
10	11	12	13	14	15	16	17	18	19	20	21
0.49	33.32	0.40	28.34	0.23	25.86	0.30	26.19	0.68	41.13	0.56	35.65
0.30	27.20	0.27	30.24	0.56	30.79	0.29	25.96	1.15	41.84	1.96	37.20
0.37	24.90	0.16	23.68	0.32	23.65	0.53	25.31	1.20	29.36	1.12	26.07
0.19	36.99	0.19	41.23	0.17	33.68	0.34	32.43	1.29	39.63	1.18	47.99
0.07	23.84	0.10	24.51	0.06	20.98	0.12	20.44	0.85	27.41	1.06	31.13
0.18	35.52	0.25	36.18	0.06	34.63	0.06	31.32	0.37	37.23	0.77	49.18
0.16	36.36	0.12	37.63	0.18	35.54	0.17	32.47	0.44	37.39	0.45	34.29
0.53	38.29	0.45	35.86	0.42	30.35	0.16	28.85	0.57	32.96	1.33	31.44
0.45	38.32	0.16	35.17	0.08	34.53	0.07	34.15	0.41	37.20	1.06	47.24
0.65	23.77	0.18	22.20	0.08	21.38	0.05	19.67	0.24	24.55	1.44	36.54
0.46	34.28	0.20	31.32	0.36	34.28	0.25	30.05	0.27	33.04	0.33	30.22
0.18	20.00	0.09	23.20	0.50	19.61	0.44	27.64	1.14	21.24	3.30	20.76
0.43	36.65	0.09	44.98	0.29	40.12	0.13	40.02	0.40	44.92	1.09	35.10
0.03	61.65	...	49.20	...	46.76	...	39.75	0.009	36.35	0.004	59.21
0.08	39.80	0.02	44.86	0.06	45.27	0.26	44.41	1.87	47.29	4.38	57.07
0.22	26.66	0.17	24.82	0.76	29.57	1.40	30.28	1.31	23.00	0.72	24.34
0.30	38.74	0.15	35.92	0.13	36.81	0.10	33.96	0.07	34.05	0.59	38.83
0.24	40.73	0.08	40.80	0.04	55.24	0.05	35.04	0.46	43.73	0.41	36.95
1.35	30.66	0.95	30.67	0.43	33.58	0.23	37.35	0.31	23.96	0.51	28.68
0.06	38.51	0.05	35.79	0.13	38.93	0.05	30.53	0.02	32.57	0.16	35.58
0.12	27.58	0.11	29.46	0.27	35.62	0.14	25.28	...	22.71	0.39	37.41
0.31	32.72	0.19	32.81	0.24	32.05	0.23	29.72	0.64	34.26	1.12	36.09

STATEMENT NO. VI.—Showing the protection afforded to infants in each town in the Provinces of Bihar and Orissa during the year 1933-34.

District.	Towns.	Number of births during the year ending 31st March 1933.	Number of deaths amongst infants under one year during the year ending 31st March 1933.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1933.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Patna	Patna	3,619	368	1,443	1st October 1884.
	Bihar	823	110	123	1st April 1887.
	Dinapur	928	155	520	28th January 1891.
	Barh	207	36	25	1st April 1887.
	Khagole	140	23	...	12th July 1910.
	Total	5,717	692	2,111	
Gaya	Gaya	2,448	956	1,137	1st January 1883.
	Tikari	228	23	91	3rd January 1891.
	Daudnagar	507	92	188	Ditto.
	Total	3,183	1,071	1,416	
Shahabad	Arrah	529	58	921	20th July 1885.
	Buxar	386	40	126	1st April 1887.
	Dumraon	390	19	72	Ditto.
	Jagadispur	236	33	248	20th December 1890.
	Sassaram	614	63	605	1st April 1887.
	Bhabhua	185	21	142	Ditto.
	Total	2,340	234	2,114	
Total of Patna Division.		11,240	1,997	5,641	
Saran	Chapra	994	203	757	1st April 1887.
	Revelganj	441	94	289	12th December 1890.
	Siwan	501	56	241	1st April 1887.
	Total	1,936	353	1,287	
Champanan	Motihari	388	71	220	1st April 1887.
	Bettiah	590	41	43	Ditto.
	Total	978	112	657	

STATEMENT NO. VI.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1933-34—contd.

District.	Towns.	Number of births during the year ending 31st March 1933.	Number of deaths amongst infants under one year during the year ending 31st March 1933.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1933.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Muzaffarpur	Muzaffarpur	1,170	165	369	1st January 1886.
	Sitamarhi	435	85	153	1st April 1887.
	Hajipur	715	175	129	1st May 1890.
	Lalganj	338	56	33	1st April 1887.
	Total	2,658	481	684	
Darbhanga	Darbhanga	2,051	311	471	24th May 1884.
	Roserah	238	20	40	3rd January 1891.
	Samastipur	242	35	59	25th July 1910.
	Madhubani	608	49	211	1st April 1887.
	Total	3,139	415	781	
	Total of Tirhut Division.	8,711	1,361	3,409	
Monghyr	Monghyr	1,460	205	796	15th November 1882.
	Jamalpur	1,035	146	187	Ditto.
	Total	2,495	351	983	
Bhagalpur	Bhagalpur	1,647	283	658	15th February 1884, withdrawn on 16th October 1895 ; re-extended on 18th August 1898.
	Colgong	172	25	26	Ditto, re-extended on 19th December 1901.
	Total	1,819	308	684	
Purnea	Purnea	227	43	121	1st July 1887.
	Kishanganj	123	4	98	12th November 1892.
	Katihar	172	27	69	8th August 1910.
	Forbesganj	166	20	25	9th August 1912.
	Total	688	94	313	

STATEMENT NO. VI.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1933-34—contd.

District.	Towns.	Number of births during the year ending 31st March 1933.	Number of deaths amongst infants under one year during the year ending 31st March 1933.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1933.	Date of extension of Vaccination Act to town.
1	2	3	4	5	6
Santal Parganas	Sahibganj ...	125	15	363	1st May 1884.
	Deoghar ...	137	14	119	Ditto.
	Madhupur ...	54	7	116	22nd August 1910.
	Dumka ...	134	11	71	Notifications, dated the 9th April 1884, and 23rd August 1910.
	Total ...	450	47	669	
Total of Bhagalpur Division.		5,452	800	2,649	
Cuttack	Cuttack ...	891	107	276	1st September 1884.
	Kendrapara ...	353	127	63	7th February 1888.
	Jajpur ...	250	41	77	Ditto.
	Total ...	1,494	275	416	
Balasore	Balasore ...	377	90	87	7th February 1888.
Puri	Puri ...	879	309	150	Ditto.
Sambalpur	Sambalpur ...	425	89	134	7th March 1895.
Total of Division. Orissa		3,175	763	787	
Hazaribagh	Hazaribagh ...	586	38	387	1st January 1885.
	Chatra ...	164	7	264	1st August 1885.
	Giridih ...	262	9	165	8th September 1910.
	Total ...	1,012	54	816	
Ranchi	Ranchi ...	542	33	1,122	1st April 1887.
	Lohardaga ...	361	33	225	25th June 1882.
	Total ...	903	66	1,347	

STATEMENT NO. VI.—Showing the protection afforded to infants in each town in the Province of Bihar and Orissa during the year 1933-34—concl'd.

District.		Towns.	Number of births during the year ending 31st March 1933.	Number of deaths amongst infants under one year during the year ending 31st March 1933.	Number of successful vaccinations amongst infants under one year during the year ending 31st March 1933.	Date of extension of Vaccination Act to town.
1		2	3	4	5	6
Palamau	...	Daltonganj	185	16	61	9th October 1890.
		Purulia	491	35	194	1st January 1887.
		Raghunathpur	240	19	27	9th February 1894.
Manbhum	...	Jhalda	207	28	50	9th July 1892.
		Dhanbad	271	31	17	5th December 1918.
		Jamshedpur	15,913	1,529	2,946	Since the constitution of the Board.
		Total	17,122	1,642	3,234	
Singhbhum	...	Chaibassa	373	32	253	20th June 1892.
		Chakradharpur	170	32	137	13th January 1919.
		Jugsalai	223	14	10	1st April 1924.
		Total	766	78	400	
		Total of Chota Nagpur Division.	19,988	1,856	5,858	
		Total for the Province	48,566	6,777	18,344	

ANNEXURE

Provincial Statement showing the different kinds of lymph

District.	Primary vaccination.											
	Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm.	
	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.
1	2	3	4	5	6	7	8	9	10	11	12	13
Patna	55,118	54,493	382	243	99·87	...	...
Gaya	63,713	61,912	518	1,283	97·17	...	...
Shahabad	45,733	45,655	35	43	99·82	...	...
Saran	80,551	80,212	187	152	99·58	...	...
Champaran	49,424	45,584	1,127	2,714	99·23	...	...
Muzaffarpur	89,567	89,082	389	96	99·46	...	...
Darbhanga	92,633	92,353	119	161	99·69	...	...
Monghyr	60,871	60,763	53	55	99·82	...	...
Bhagalpur	68,875	68,737	117	21	99·80	...	...
Purnea	68,085	64,255	781	3,049	94·37	...	...
Santal Parganas	58,662	57,974	145	543	98·82	...	...
Cuttack	45,279	41,917	394	2,968	92·57	...	...
Balasore	24,105	21,402	33	2,670	88·79	...	...
Angul	7,470	7,427	27	16	99·42	...	...
Puri	50,530	48,164	468	1,893	95·32	...	...
Sambalpur	20,024	19,349	33	642	96·68	...	...
Hazaribagh	48,075	47,608	203	264	99·03	...	...
Banchi	38,643	38,592	39	12	99·87	...	...
Palamau	22,139	21,327	122	690	96·33	...	...
Manbhum	54,189	53,144	710	335	98·07	...	...
Singhbhum	21,905	21,656	70	179	98·86	...	...
Total	1,065,592	1,041,606	5,952	18,034	97·75	...	...

II.
used and their rates of success during the year 1933-34.

			Re-vaccination.														
vaccination.			Direct from the calf.					With lanoline or glycerine lymph.					Arm-to-arm vaccination.				
Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.	Total.	Successful.	Unsuccessful.	Unknown.	Percentage of successful cases.
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
...	21,424	11,339	4,991	5,094	52.92	...	...	...	...	...
...	39,546	26,950	6,629	5,967	68.15	...	...	...	...	...
...	12,380	6,317	4,675	1,388	51.02	...	...	...	...	...
...	66,212	39,126	15,110	11,976	59.09	...	...	...	...	...
...	66,697	21,221	10,450	35,026	52.51	...	...	...	...	...
...	132,299	55,471	38,168	38,660	41.93	...	...	...	...	...
...	42,054	16,221	14,823	11,010	38.57	...	...	...	...	...
...	58,471	11,156	14,910	32,405	19.07	...	...	...	...	...
...	78,847	36,833	21,896	20,118	46.71	...	...	...	...	...
...	56,064	16,304	8,197	31,563	29.08	...	...	...	...	...
...	13,103	4,018	3,875	5,210	30.66	...	...	...	...	...
...	49,586	3,284	2,533	43,769	56.45	...	...	...	...	...
...	38,996	13,636	3,109	22,521	34.27	...	...	...	...	...
...	7,707	5,761	863	1,083	74.75	...	...	...	...	...
...	40,813	10,914	7,630	22,269	26.74	...	...	...	...	...
...	12,117	2,096	560	9,461	17.30	...	...	...	...	...
...	26,711	11,306	7,217	8,188	42.33	...	...	...	...	...
...	33,936	19,320	8,275	6,341	56.93	...	...	...	...	...
...	10,975	2,158	1,699	7,118	19.66	...	...	...	...	...
...	23,826	11,284	8,048	4,494	47.36	...	...	...	...	...
...	19,370	13,126	4,047	2,197	67.76	...	...	...	...	...
...	851,134	337,571	187,705	325,858	39.76	...	...	...	...	...

No. 8453-L. S.-G.

GOVERNMENT OF BIHAR AND ORISSA.

(MINISTRY OF LOCAL SELF-GOVERNMENT.)

R E S O L U T I O N.

The 14th December 1934.

READ—

The Public Health Report for the year 1933 and the Vaccination Report for the year 1933-34.

1. *Vital statistics.*—The total number of births rose from 1,272,296 to 1,346,948 and of deaths from 775,945 to 833,397, and the excess of the birth rate over the death rate was 13·6 as compared with 13·2 in the previous year. A somewhat heavier mortality from small-pox contributed towards the slight rise in the death rate during the year under review, but the figure is still below the average.

The verification of the records of vital statistics, both in urban and rural areas, continues to receive the attention of the Public Health Department. The responsibility of collection, tabulation and checking of vital occurrences has so far been transferred to six municipalities, and it is hoped that, as the number of municipalities employing health officers of their own increases, more of them will be in a position to assume this responsibility. Government are fully alive to the value on the one hand, of an accurate record of vital statistics in assessing and improving local health conditions, and to the practical difficulties, on the other hand, in the way of achieving such accuracy under present conditions.

2. *Infant mortality.*—Government notice with much regret that there was an increase in the rate of infant mortality from 128·8 to 135·2 per thousand on the basis of actual births recorded. This clearly indicates the urgent need of maternity work being taken up in greater earnest by local bodies throughout the province. Although most district boards and municipalities appear to recognise the importance of this problem, its magnitude is so great that, unless the present rate of progress is accelerated many years must elapse before the incidence of mortality among infants is reduced to a reasonably low level. In the rural areas very little has yet been attempted in this direction; and in municipal towns also, although activities are more marked in the Bhagalpur, Orissa and Chota Nagpur Divisions than in the Patna and Tirhut Divisions, much yet remains to be done everywhere. The maternity and child welfare work under the Jharia Mines Board of Health continues to be satisfactory. There were eleven centres at work under the auspices of the Bihar and Orissa Maternity and Child Welfare Society, and these rendered useful aid to the public.

3. *Cholera.*—This disease was prevalent, for a part of the year and in a mild form, in the districts of North Bihar, specially Darbhanga, Champaran and Muzaffarpur, and more or less throughout the year in the districts of Balasore and Cuttack. The result was that the mortality from cholera rose from 9,348 to 17,514, and the death rate from 0·2 to 0·5. Facilities afforded to district boards to combat this disease remained the same as in previous years, viz., Government epidemic doctors were deputed, disinfectant and cholera vaccine issued, and grants given where necessary. Preventive measures against cholera were successful in all important melas and festivals, e. g., the Snan and Rathjatra festivals at Puri, the Pitripaksha mela in Gaya and the Sonepur fair.

4. *Bacteriophage.*—The experiments with cholera phage having proved successful in the two previous years in the districts of Purnea and Muzaffarpur, its use was extended to two other districts, viz., Patna and Gaya. Like cholera

inoculation, cholera phage has now established its popularity, and the demand for it is on the increase. Many district boards have promised contributions to Government this year for the production of this valuable remedy against cholera in the Public Health Laboratory in this province, and it is hoped that those district boards which are in arrears will pay their contributions before the close of the current financial year.

5. *Small-pox*.—The Public Health Department anticipated that 1933-34 would be a bad year for small-pox, and events proved the accuracy of this forecast. The deaths from this disease rose from 8,028 in 1931 to 16,466 in 1932, and to 42,674 in 1933. The urban areas suffered more from small-pox than the rural areas, and the towns of Gaya, Motihari and Ranchi reported the highest death rates. In the opinion of the Director of Public Health the rise in mortality is largely due to the fact that a large number of children still escape even primary vaccination and thus remain entirely unprotected. Moreover, the immunity conferred by vaccination gradually declines with the passage of time, with the result that protection passes off within 6 or 7 years. It is therefore important that recourse should be had not only to primary vaccination on a wholesale scale but also to revaccination in the same manner throughout the province. As stated in the last year's resolution, primary vaccination has for some time past been compulsory in urban areas only, and a beginning has now been made to enforce it in rural areas also. Small-pox can be definitely prevented provided repeated vaccinations are universally practised, but this ideal will remain difficult of attainment until people come forward voluntarily to protect themselves in this simple way from needless suffering and death.

6. *Prevention of blindness*.—The propaganda against preventable blindness which was started in the previous year was continued during the year by the health officers of the Gaya district board and the Patna City municipality. The case histories of a few persons afflicted with this disease revealed the fact that timely help could have saved the sufferers from loss of sight for life.

7. *School medical inspection*.—Out of 12,113 boys and 492 girls examined, as many as 6,719 boys and 344 girls were found to be defective or diseased. The majority of the boys had minor ailments, but major defects of eye and heart were also noticed, besides a few cases of leprosy. In last year's resolution reference was made to the introduction of an experiment with a view to increase the efficiency of the work done, particularly in the direction of ensuring that the defects pointed out at the medical inspections were followed up and treated. This experiment was carried out and in all cases in which medical advice or treatment was recommended, instructions were given to the headmasters concerned to insist on the return of the counterfoils of the forms issued on the outdoor tickets, as the case may be, so that the inspecting officers might verify on their next visit that the children had received the medical treatment recommended by them. In the divisional headquarters the children requiring treatment were taken to the headquarters hospitals and the results of the treatment noted in a special register maintained for the purpose.

8. *Public Health Department (Engineering Branch)*.—A summary of the activities of this department relating to sanitary improvements in areas under the jurisdiction of local bodies during the year is appended to the report.

9. The office of the Director of Public Health was held by Lieutenant-Colonel J. A. S. Phillips, C.I.E., I.M.S., from the 1st January to the 9th February and again from the 7th October to the 31st December. During the remaining period Major S. L. Mitra, I.M.S. was in charge. The thanks of Government are due to both these officers for the efficient manner in which they discharged their duties. The relations between the department and local bodies continued to be cordial. Government have noted the names of the subordinate officers commended in the report.

By order of the Govt. of Bihar and Orissa
(Ministry of Local Self-Govt.),

W. G. LACEY,

Offg. Secretary to Government.

